

# **college AND UNIVERSITY business**

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**MARCH 1957**

***Student Health Insurance***

***Faculty-Business Office Relations***

***Building the Food Service Budget***

***Reducing Freshman Failures***

***Library Planning Pays Off***

LIBRARY STAIRCASE, CARLTON COLLEGE, NORTHFIELD, MINN. (page 38)



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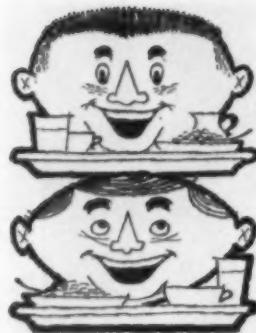
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MEAT PREPARATION AREA. Stainless steel gas ranges and fryers at rear. Note entire bank is positioned on elevated tile base for sanitation. Cook's table includes built-in rounded corner bain marie.



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Ferguson R. Ormes

FERGUSON R. ORMES, professor of economics and controller of Wabash College, Crawfordsville, Ind., has had unusual success in the administration of the student loan program at his institution and on page 23 reports the procedures followed. He first joined the staff of Wabash College in 1921 and, prior to that time, had been in business in New York for a two-year period following 18 months as a chief petty officer in the navy during World War I. He has been interested in matters relative to finance for many years, and is the author of a book on elementary construction and analysis of financial statements published in 1941.



Gwendolyn L. Taylor

As any college or university administrator of a business office can tell you, the relationship between the faculty and the business office is one that can be a happy or a difficult one, depending on the skill with which the relationships are handled. On page 28, GWENDOLYN L. TAYLOR, controller of Reed College at Portland, Ore., outlines her philosophy and technics in regard to the matter of achieving harmonious relationship between business office and faculty. Mrs. Taylor has been a member of the business office staff at Reed College for the last 18 years; prior to that time, she had been a teacher in a high school in Petersburg, Va., and in a business college at Salem, Ore. Her hobbies are typically feminine: housekeeping, conversation and gardening.



Wesley Hertenstein

WESLEY HERTENSTEIN, director of physical plant at California Institute of Technology, describes on page 34 the significant construction features of the new athletic center at his institution. Because of the research character of Caltech, the athletic program is a modified one in comparison with other institutions of college or university nature. Mr. Hertenstein first began his work at Caltech in 1930 as supervising engineer and purchasing agent and held that position for six years, and then served for a one-year period as resident engineer of the Pasadena Water Department, Pasadena, Calif. He has been in his present position since 1938. He is a former president of Governmental and Public Building Supervisors Conference for the southern California area. When quizzed as to his hobbies, he reported gardening, trout fishing and photography.



Theodore M. Rehder

THEODORE M. REHDER, director of dormitories and dining services at the State University of Iowa, has definite ideas as to how a food service budget should be developed and reports his thinking on this subject on page 53. Mr. Rehder has been an active member of the National Restaurant Association, a leader in the informal group of food service directors of the Big Ten Universities, and a frequent member of the faculty of the Food Service Institute developed under the sponsorship of COLLEGE AND UNIVERSITY BUSINESS in cooperation with Northwestern University and the University of Chicago. Ted is very much an outdoor man and enjoys most being able to get away for vacation camping trips in the Rocky Mountain states.

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# QUESTIONS AND ANSWERS

## **Assurance of Autonomy**

Question: How can independence of educational institutions be justified to state legislatures and the public?—C.A., R.I.

ANSWER: Since the establishment of the first institution of higher learning in the United States, most colleges and universities have been organized under a plan whereby a governing board established policy and the officers and faculty administered the institution and developed the educational program. This has been true in both publicly and privately controlled institutions. The right of governing boards of publicly controlled institutions to establish policy without dictation from elected or appointed state officials and the right of the administration and the faculty to carry out the approved program under the policies set forth undoubtedly have been major factors in encouraging the development of distinguished publicly controlled colleges and universities.

Publicly controlled colleges and universities must serve all of society. To do so effectively they must be free from the pressure of vested interests. They must teach without bias and they must engage in scholarly research that will benefit the state and the nation. There is a direct correlation between academic excellence and autonomy, and the states that have wisely provided autonomy for their colleges and universities have profited through the services provided by their outstanding institutions of higher education.

The presence of a strong governing board and an effective administration and faculty should preclude the necessity of direct state control. However, the board and the officers must establish policy and procedure that will give assurance of integrity in the administration of public funds. When this has been done, the board, officers and faculty should be free to develop the best educational program possible within the limits of funds available.

The constitution of the state of California specifically provides that the University of California "shall be entirely independent of all political or

sectarian influence. . . ." Constitutions of several other states also provide autonomy for publicly controlled colleges and universities.—RAYMOND W. KETTLER, controller, *Regents of the University of California*.

## **Support Monies**

Question: What effect does government and foundation support have upon other potential sources of funds?—D.E., Maine.

ANSWER: The effect that government and foundation support has on the other potential sources of funds depends upon the type of this support and the conditions on which it is offered. Most of the present support institutions have been receiving from the federal government is in the field of contract research. This kind of support, in my opinion, does not have a deleterious effect on other potential sources of funds. If government support is based on a condition of matching, as is the case with the new medical research facilities program, then the government support tends to "prime the pump" and will increase giving from nongovernment sources. On the other hand, government support for general educational purposes, if it were to come, would in the long run tend to decrease support received from private sources.

Foundation support, I believe, tends to increase support from other potential sources of funds. This is an obvious fact when such support is offered on a matching basis. However, even if foundation support is given on a

nonmatching basis, I believe that it stimulates private philanthropy to increase giving for educational purposes.

In consideration of all factors, in my judgment, government and foundation support have tended to stimulate and encourage support from other potential sources of funds—CLARENCE SCHEPS, controller, *Tulane University*.

## **Student Participation**

Question: What is the value of student participation in the formulation of policies that affect an educational institution?—J.D., Ore.

ANSWER: I shall cite only two or three of our experiences. As in most governmental situations where the effectiveness of a policy is dependent upon the acceptance of the group affected, we have solicited student participation as a long-standing principle. Regulations governing group living, general demeanor, circumstances for dismissal, and similar matters have been established with substantial student participation. The president's grant of power to the student government is an extensive one. This practice is successful, I believe, wherever the policies involved are close enough to the experience of the students to give them some basis for judgment.

We also have had success with students participating as sponsors of certain auxiliary enterprises. They have been largely responsible for establishing and supporting such matters as price policy, standards of service, and standards of dress and decorum in student tearooms.

A third area of student participation in policy formulation has been in respect to cultural events. Joint student-faculty participation in planning the character of our programs has been mutually beneficial. In this process student leaders gain an understanding of faculty and administrative reasoning. At the same time they are instrumental in helping select, among programs of equal artistic merit, those that will have the greater student appeal.—GORDON P. FREESE, controller, *Stephens College*.

If you have a question on business or departmental administration that you would like to have answered, send your query to COLLEGE and UNIVERSITY BUSINESS, 919 North Michigan Avenue, Chicago 11, Ill. Questions will be forwarded to leaders in appropriate college and university fields for authoritative replies. Answers will be published in forthcoming issues. No answers will be handled through correspondence.



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Camera Instructions are given by Mrs. Katherine Stenholm, Director of the Bob Jones University's film unit.



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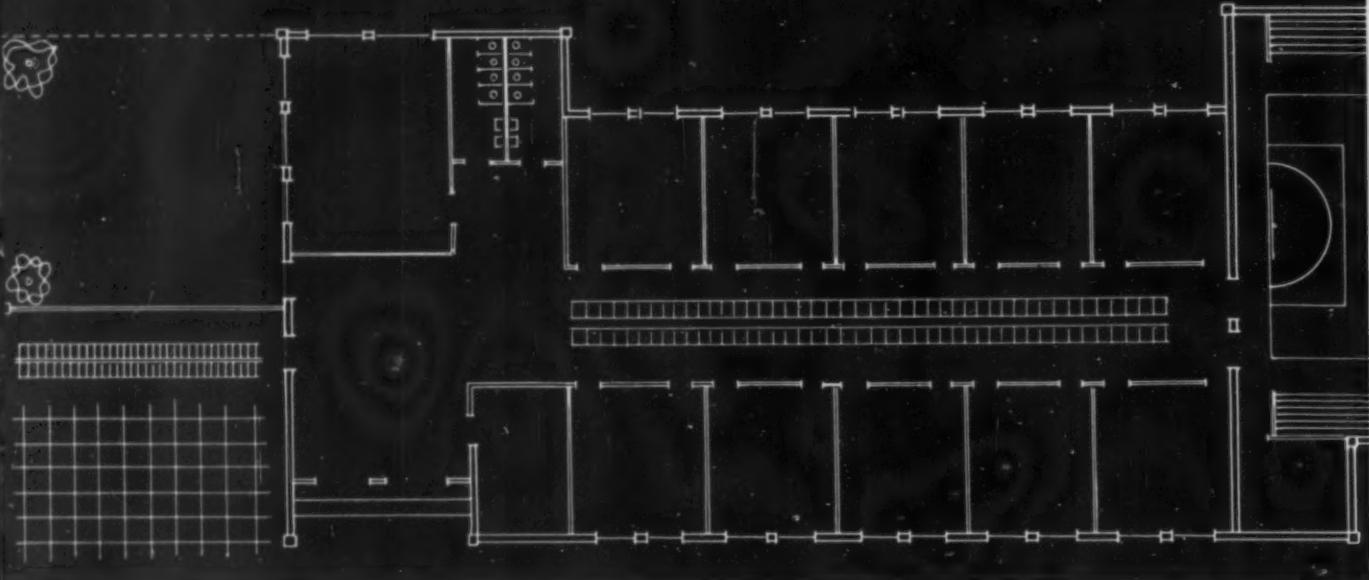
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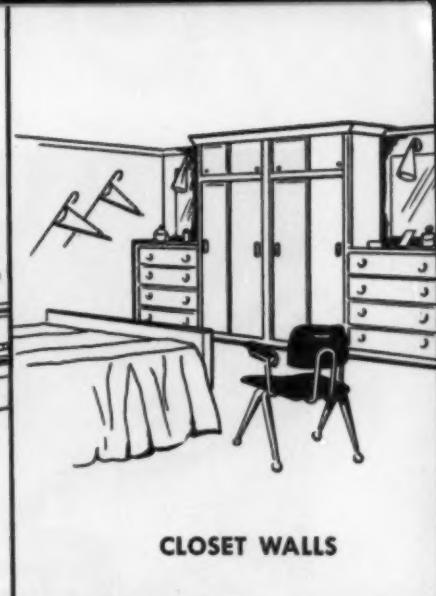
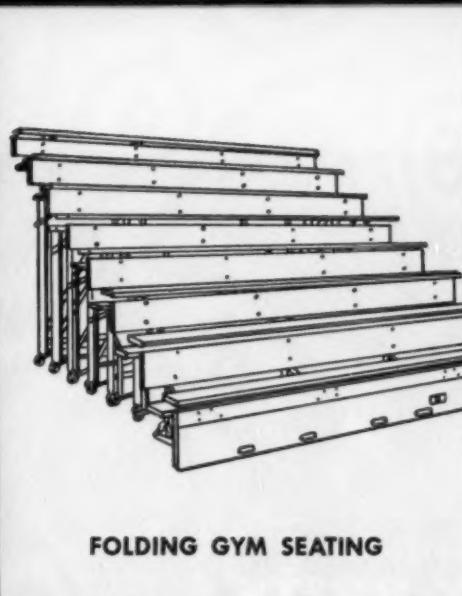
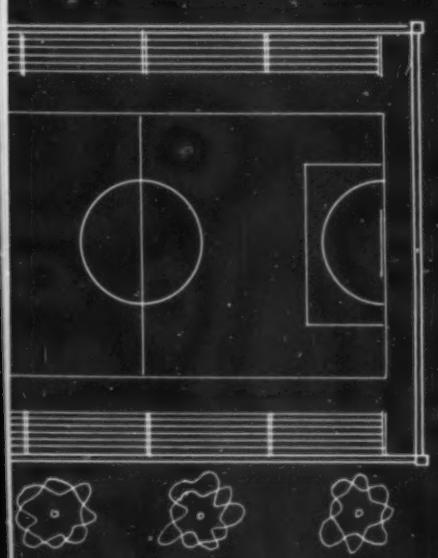
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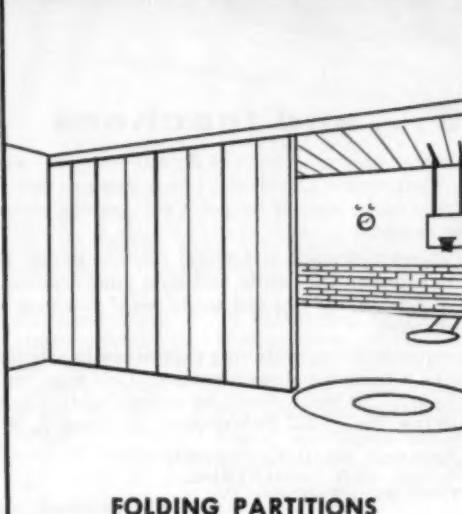


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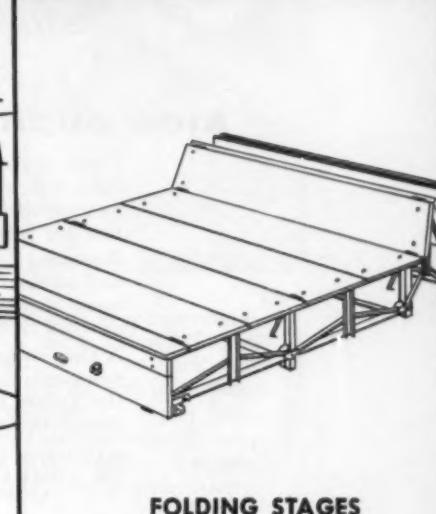
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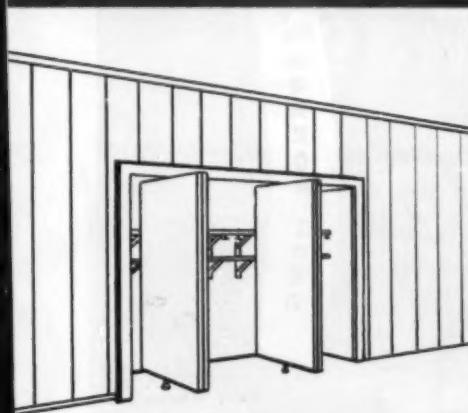
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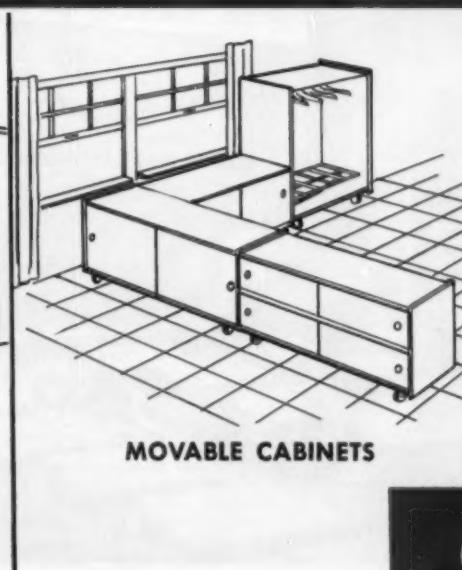
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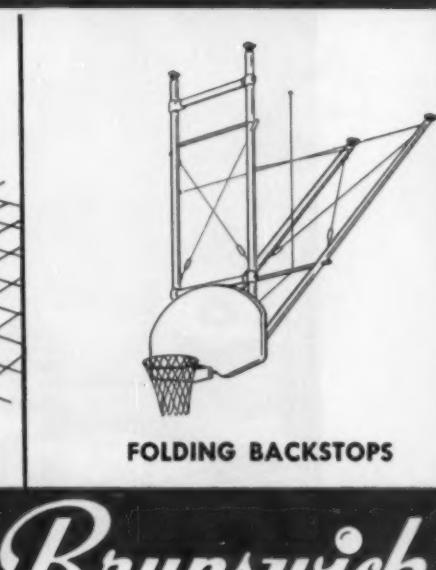
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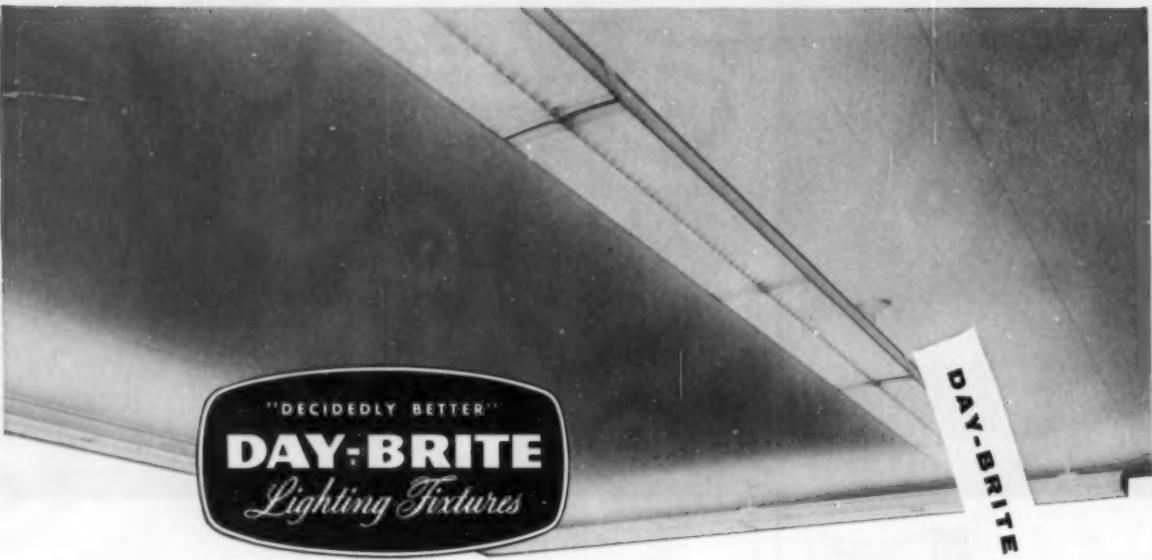
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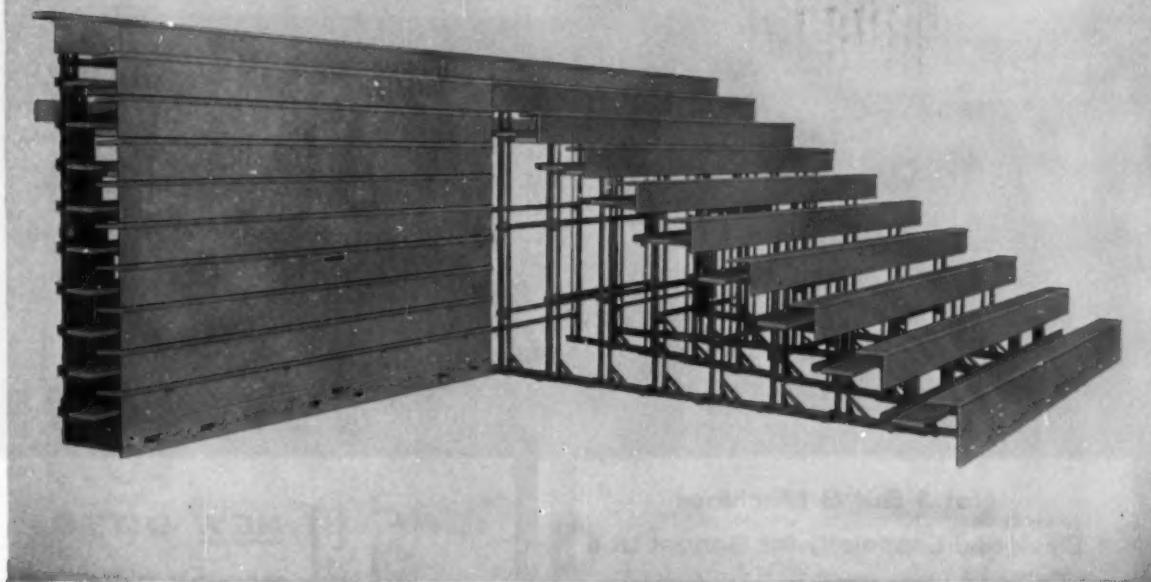
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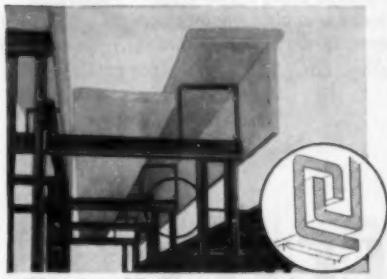
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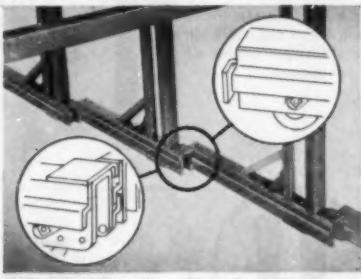
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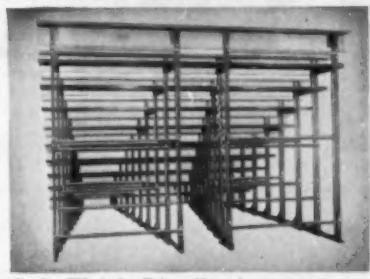
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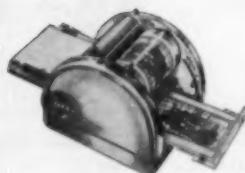
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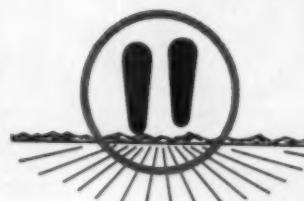
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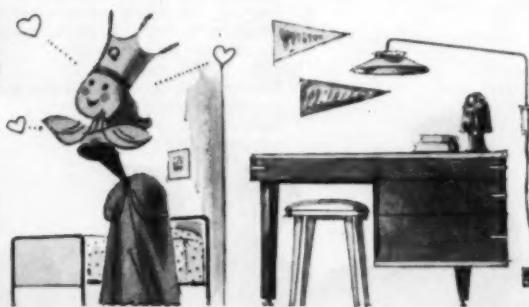


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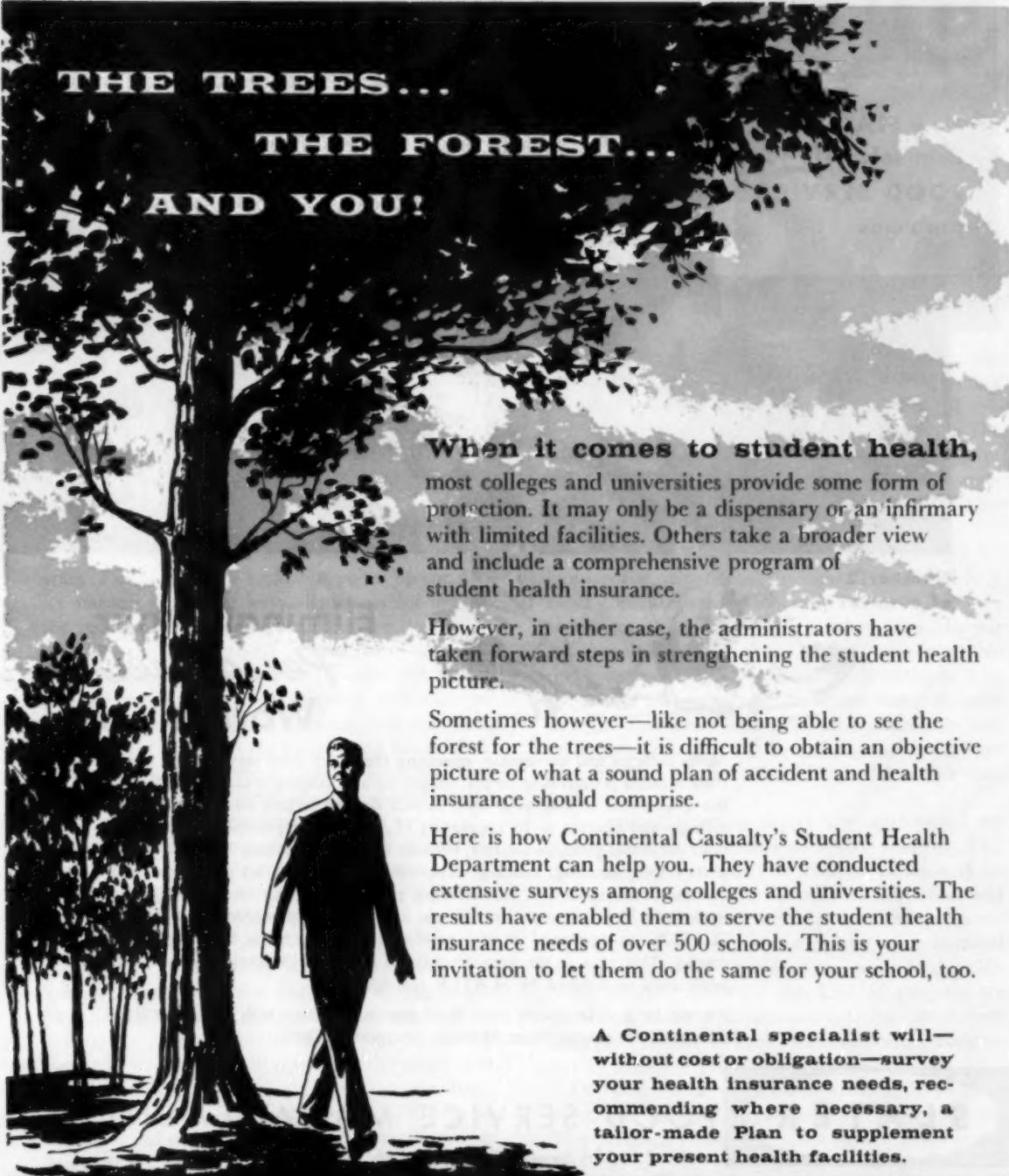
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# Federal Aid to Junior Colleges

**CLIFFORD P. CASE**

United States Senator from New Jersey



IT IS CLEAR THAT THE NEED FOR ASSISTANCE TO public schools will have priority in Congress. I am hopeful indeed that this session of Congress will enact a school aid bill. The President's emphasis on this in his messages to Congress indicates that he plans to exert vigorous leadership to achieve this.

But let us not forget that this bill has been years in the making. It did not spring full-blown from idea into enactment in a few months, or even a few years. I emphasize this because it points up the need for starting to explore ways and means for meeting the problem of a growing shortage in college facilities. We are losing ground in our goal of increasing educational opportunities. This problem calls for the best we can muster in imagination and initiative. There is no greater natural resource than our young people—with them lies the security and future of the nation. Now is the time to develop ideas and hammer them out on the forge of public discussion into a real instrument for progress.

The problem of adequate college facilities has two major dimensions. We must increase total college capacity and keep the cost of a college education within the budgets of American families.

We are pricing our youth out of college. A recent *New York Times* survey of college tuition costs around the nation showed that higher operating costs have forced many of the nation's colleges and universities to increase tuition costs from 50 to 100 per cent in the last 10 years. At the same time, other costs of a college education are also rising. One major college has announced a \$200 increase in tuition and room and board charges for September, bringing the cost of tuition, room, board and incidentals to \$1800 a year.

Clearly, increases such as this—and these do not meet the actual current costs of students at such institutions—tend to deny education to those least able to afford the higher costs.

I have proposed consideration of an emergency program of federal aid to provide classrooms at two-year colleges through grants in aid to the states. Let me explain briefly what my plan contemplates. It would provide a five-year emergency program of federal assistance to the states to help two-year col-

leges get started or help existing ones to grow. The aid would be made available on a formula reflecting the number of youngsters in a state who are of college age and the per capita income of the state. The funds would be granted for physical plant and equipment on a matching basis with the state government putting up two-thirds and the federal government the remaining one-third.

The states would develop a statewide plan for the location and operation of the units. This should help avoid concentration of too many units in one area of the state and a shortage in other parts. In our less populated states, there may be only one centrally located unit. The location of colleges near the homes of youths will encourage many to enter college. For those who lack either dormitory fees or tuition, or lack both, the public two-year college near by may be their only chance for higher education.

In general, I would expect the units would try to meet the needs of two groups of students: (1) those seeking two years of college preliminary to taking two or more years at another institution, and (2) those planning to wind up their college career in the two years and who therefore want terminal courses in general education and vocational fields. Many colleges that offer this kind of program are known as junior or community colleges. Some have attempted further to meet the needs of the community by adding a program of adult education.

Of course, such a program would only partially meet the need for expansion of college capacity. This program alone will not assure a gown and a diploma to each youngster with the qualifications for college. On the other hand, it promises the most economical way of bringing higher education within reach of the most people.

This problem will require a high order of leadership, experience and cooperation. There are many facets to the problem, such as how to handle accreditation, state and local financing, and recruitment of college teachers.

My proposal is not a finished one. The commas have not been placed and, until the last one is in position, there is room for improvement.

# LOOKING FORWARD

## The President's Committee

THE FIRST INTERIM REPORT OF THE COMMITTEE ON Education Beyond the High School has been submitted to President Eisenhower. Under the chairmanship of Devereux C. Josephs, chairman of the board of the New York Life Insurance Company, the committee has in the last eight months held five committee meetings to formulate premises for the work ahead, to identify the most critical problems of post-high school education, and to stimulate action to solve them.

Six conclusions have been arrived at by the committee on the basis of preliminary discussion and research. They are: (1) Our ideas and the increasing complexity of our civilization require that each individual develop his or her talents to the full. (2) The needs of the individual and of society, plus an unprecedented growth in the population of post-high school age, will far outrun the present or planned capacity of existing colleges or universities and other post-high school institutions. (3) The needs of the oncoming millions of individuals with varying capacities and interests will call for a broader range of educational opportunities and less rigid time requirements. (4) Many more able and qualified teachers will be needed than present efforts can provide. (5) There must be promptly formulated an explicit, considered policy as to the rôle of the federal government in education beyond the high school. (6) Even with the best utilization of existing resources, additional financial support must be provided if the additional millions in the population are to be enabled fully to develop their talents.

This report has staked out areas of concern, but the committee has not as yet prepared specific programs to aid in solving the problems.

In commenting on the report, Mr. Josephs stated: "We are not trying to formulate a brilliant report. The road to inertia is paved with good reports. We are hoping to stimulate public discussion and to get a little action."

A start has been made, but a lot more needs to be done if the imagination of the general public is to be captured and exploited in behalf of higher education. Time is running short.

## Tax Exemption

TAXES ARE MUCH ON THE MINDS OF ALL AT THIS season of the year. Somehow or other, the tax collector seems to arrive at a time when the average citizen is

worrying about paying his heating bill and retiring his mortgage; he is in deep enough without having to worry about income taxes.

For parents of young people in college the income tax means double trouble. The high cost of higher education puts a real squeeze on the family budget. Recognizing this, Sen. J. William Fulbright (D.-Ark.) is sponsoring legislation to provide income tax exemption for those who may be supporting full-time students in college.

The *Chicago Sun-Times*, in an editorial published February 11, stated that "it can be argued with some justification that to deny educational tax relief to individuals is discriminatory. Corporations may donate money to a university or college which may be used to finance the education of a particular deserving student. The corporation deducts this from its income before paying taxes. In effect, a corporation can put a student through school on tax exempt dollars, but if the student's parents did this on their own they could not claim any deduction."

This apparent inconsistency in the income tax structure should be corrected by appropriate legislation.



Go Ahead—Sign It, Uncle

**One college reports that final losses on student loans can be limited to about 5 per cent. In fact, 90 per cent or more of money lent can be expected back within five years from the time the borrower leaves Alma Mater's protecting arms.**



## **Wabash College finds the record good on**

# ***Repayment of Student Loans***

**F. R. ORMES**

*Controller, Wabash College, Crawfordsville, Ind.*

THIS ARTICLE IS A SUMMARY OF THE results of a study of the amounts of student loan collections, of the time periods involved, and of the ratio of final losses, at Wabash College.

The period covered by the study is the 30 years 1926-27 to and including 1955-56. The student body is composed of men only, and today is about 600. The curriculum is liberal arts, takes four years, and leads to the B.A. degree only.

Probably 98 per cent (in dollars) of loans to students at this institution are made for a part or all of the tuition fees. The only period when cash loans, either in number of loans or

in amount, were of more than negligible volume was following War II when veterans abounded.

From much longer ago than 1926-27 we had accumulated accurate data with respect (a) to the total loans made to students in college in each school year, and (b) to total repayments on loans, principal and interest, received in any one fiscal year from all former student borrowers. Certain questions of interest and importance, however, cannot be answered from such data.

Since most student loans, regardless of the specific wording of the promissory notes, are in fact intermediate if

not long-term loans, one wants to know what proportion of them are finally repaid, and how long are the periods involved. What does the term *finally* mean? What is the loss ratio? What if any differences are there between the showing, with respect to such questions, of former student borrowers who were graduated and those who withdrew before completing their courses of study? The record of each particular borrower was available, but the question was, how to arrive at generalized conclusions.

It seemed that the best if not the only possible approach was to sort all former student borrowers, whether

graduated or withdrawn prior to graduation, into yearly groups by the dates of their departure from college, and then to trace and to tabulate the repayments of each such group through the following years to some point when further efforts to collect were regarded as useless.

In view of the long periods involved, it was clear that no time unit smaller than a full year should be recognized. August 31 has been the ending date of the fiscal year of the college ever since 1928. Every student borrower registered at the beginning of either the first or the second semester of any school year was considered statistically to have departed the next June, whether he remained in college a month, a semester, or the entire year.

#### INTEREST NOT INCLUDED

One further explanatory note about the treatment of interest is in order. In all cases except the few in which interest payments could be specifically identified to part payments, interest was considered simply to be any excess of total repayments over the amounts lent; no unpaid or accrued interest was included in computing loss ratios.

Space limitations prevent the presentation here of all 30 tabulations of the repayment record, especially since in many of the early years of the period repayments were still being received more than 20 years after departure from college. These year-group summaries display results with extraordinary variations. For example, eight graduates and 16 others departed during or at the end of 1929-30 owing \$2665. By the end of the fifth year after their departure nothing had been repaid by any one of the group; by the end of the tenth year only 8.6 per cent had been repaid, and by the end of the fifteenth year, only 30.8 per cent. The final payment by any member of this group of 24 men came in 1952-53, 23 years after departure from the campus. This payment lifted the final collection percentage to only 34.6, including \$262.25 interest to offset in part the loss of \$2006 of the original amounts lent.

At the other extreme is the record of the 35 borrowers (23 graduates and 12 nongraduates) who departed in 1937. To the whole group \$3450 had been loaned. By the end of their fifth year out of college they had paid back 72 per cent of the amounts borrowed, and by the end of the tenth year, 101.3 per cent. Final losses were

Table 1—Comparative Rapidity of Student Loan Repayments

	Five Groups '27-'31	Five Groups '32-'36	Four Groups '37-'40	Three Groups '41-'42	One Group 1950	One Group 1952
No. borrowers.....	125	161	161	204	17	50
Amounts lent.....	\$15,788	\$22,655	\$18,708	\$21,755	\$ 2,502	\$13,469
Average loans.....	\$ 118	\$ 141	\$ 116	\$ 107	\$ 147	\$ 269
Repayments:						
Principal.....	\$ 7,881	\$14,120	\$16,512	\$20,128	\$ 2,331	\$ 8,869
Interest.....	1,777	3,101	1,514	1,021	131	353
Total.....	\$ 9,658	\$17,221	\$18,026	\$21,249	\$ 2,462	\$ 9,222
Cumulative % repayments by Aug. 31:					Percentages	
Yr. departure.....	0.2	0.4	2.2	13.6	23.8	20.8
1st yr. after.....	0.2	0.4	11.2	38.9	71.5	49.1
2d yr. after.....	0.5	1.1	19.4	61.9	83.6	57.6
3d yr. after.....	1.4	3.1	43.1	80.5	90.2	66.8
4th yr. after.....	2.6	7.8	64.5	86.5	98.4	70.0
5th yr. after.....	3.0	13.0	74.0	92.5	98.4	
6th yr. after.....	4.0	15.6	81.2	92.9	98.4	
7th yr. after.....	5.1	23.6	86.6	93.8		
10th yr. after.....	13.4	48.6	93.1	96.0		
15th yr. after.....	51.6	69.3	96.3	97.2		
20th yr. after.....	58.4	76.0				
Final, incl. int.....	61.2	76.0	96.3	97.2		
Final, excl. int.....	49.9	62.3	88.3	92.5		
Yr. last payment.....	24th	19th	15th	14th		
Final losses:						
Amount.....	\$ 7,906	\$ 8,536	\$ 2,196	\$ 1,626		
Per cent to loans .....	50.1	37.7	11.7	7.5		

\$314.80, which was more than offset by interest of \$447.31 paid by the others. These losses represented three former students (one of them deceased in 1939) who never paid anything, and two others who had made substantial part payments and then defaulted.

In recent years it has become the practice to regard as uncollectible the obligations of former students who

have neither made any payment nor been heard from within seven years after their departure. It so happens that the nine graduates and 12 nongraduates of the 1949 group compose the most recent one which at present is considered to have completed its record of repayments. All but one of the 21 paid in full within the seven years; the one was a lad who was here for his freshman year only, who bor-

Table 2—Final Repayments of Loans, Graduates vs. Nongraduates in Percentage of Amounts Lent

Left in June of	GRADUATES			NONGRADUATES		
	No. Borrowers	Amount of Loans	Repayments Per Cent	No. Borrowers	Amount of Loans	Repayments Per Cent
1927.....	8	\$1,068	65.5	4	\$ 341	44.0
1928.....	15	2,015	59.9	10	1,710	75.3
1929.....	10	1,539	64.4	17	1,145	53.7
1930.....	8	1,030	56.9	16	1,635	20.0
1931.....	13	2,585	73.8	24	2,719	69.1
1932.....	19	3,283	84.0	22	3,335	37.4
1933.....	11	2,020	80.3	19	2,868	78.6
1934.....	13	1,128	108.7	15	1,070	65.0
1935.....	12	2,209	88.3	15	1,819	71.0
1936.....	19	2,733	86.2	17	2,190	83.5
1937.....	23	2,145	106.7	12	1,305	99.1
1938.....	20	2,750	99.9	10	1,215	59.3
1939.....	21	2,683	106.2	20	2,053	98.5
1940.....	21	2,805	102.7	34	3,752	85.9
1941.....	26	2,790	104.4	36	4,731	84.7
1942.....	26	2,909	97.3	30	2,481	94.3
1943.....	25	3,283	105.6	61	5,560	100.6
1944.....	6	480	75.5	4	510	107.3
1945.....	..	.....	.....	4	381	101.3
1946.....	3	405	102.5	4	330	79.2
1947.....	1	100	101.0	2	175	106.2
1948.....	4	560	110.0	7	1,175	59.3
1949.....	9	1,250	105.6	12	1,912	97.5
	313	\$41,771	91.2	395	\$44,413	78.2

rowed \$125, and whose whereabouts has been unknown for three full years. Repayments by this group have been: 42.3 per cent by the end of the summer of 1949, 82.7 per cent by the end of the fifth year, and 100.7 per cent by Aug. 31, 1956. Loans to the group were \$3162 and repayments have been \$3037 principal and \$148 interest.

Table 1 has been constructed on the assumption that the main trends are as well demonstrated by combining data for several groups as by the much more voluminous details for every single group. The first four vertical columns in the table, therefore, show combined data for student borrowers departed at the end of each of the five years 1927 to 1931; the five years 1932 to 1936; the four years 1937 to 1940, and the three years 1941 to 1943. The fifth and sixth columns represent specimen single groups departed in the two recent years 1950 and 1952, both of them considered still active.

#### 1944-48 FIGURES OMITTED

The five groups of 1944 to 1948 have been omitted entirely from the table; the figures for these war years are distorted by reason of the insignificant number of non-navy and non-veteran students and the very few loans made. Final repayment percentages for these five groups can be read from Table 2.

During the thirty years annual tuition, which was \$150 in 1926-27, was increased in eight separate steps to \$600 in 1955-56.

The 1956 group, 38 graduates and 19 nongraduates, received loans to the total of \$19,393 during their days on campus. This exceeded by \$4200 the previous high. One student owed \$1000, one only \$50; the mean was \$340 and the median \$250. Seventeen owed exactly \$100 each, and another 17 owed \$500 or more. By the end

of the summer \$3179, 16.4 per cent of the total, had been paid back.

The improvement over these years in the percentage of total final repayments, and the shortening of the time during which loan funds have been tied up, are sufficiently conspicuous from this tabulation. More than one cause has contributed. The promissory note forms used until 1939-40, for instance, specified (in accordance with the terms of the two loan endowments which supplied most of the funds for lending) that in the one case three years, and in the other four, were to elapse after departure before notes should mature; also that no interest was to be charged during this period.

#### BORROWERS NEED PRODDING

Economic conditions in the first half of the Thirties certainly were a major cause both of slow collections and of final losses. My experience, however, which began in a small way in 1928-29, convinces me that thoughtful administration and close follow-up are the most important things. Most of these young men are willing, many indeed anxious, to pay, but they do need to be prodded. Resort to outside help has been had but only in a mere handful of cases.

In order to get a comparison of the repayment record of graduates with that of nongraduates a further analysis was made of the first 23 of the 30 groups of student borrowers. These included all groups from that of 1927 to that of 1949, those since being considered still active. The nongraduates of these 23 groups outnumbered the graduates 395 to 313, and total loans to them were \$44,413 and \$41,771, respectively.

One would perhaps expect to find that graduate borrowers, because of their status as alumni and because of

their longer exposure to college influences and associations, would prove to have made the better record, and it is so. The 313 graduates have repaid \$34,117 against the \$41,771 loaned them, plus \$3971 interest, or \$38,088 altogether. These repayments are 81.7 per cent (principal only) and 91.2 per cent (if interest is included) of the original amounts loaned.

The nongraduating borrowers, who owed \$44,413 when they left college, have repaid \$30,979 principal and \$3744 interest, for percentages of 69.7 if interest is not counted and 78.2 if it is.

There are wide variations in the repayment performances of the individual groups. In all cases the ratios shown are those of repayments, including interest, to amounts of loans originally made. Four of the groups (three of them very small war-year ones) display a better record by nongraduates than by graduates; in the other 19 groups the scales tip the other way, the preponderances being close in some cases and far apart in others.

#### 1943 GROUP HAS BEST RECORD

One notices also that 10 of the graduate groups and four of the non-graduate ones have scored repayment records of 100 per cent or more, and that three of the nongraduate groups have made less than 50 per cent. The 1943 group, with 25 graduates and 61 nongraduates, is at once by far the largest group in the entire list and at the same time the one with the best record.

General conclusions are probably risky. But it seems possible now to suppose that, for this institution, final losses on student loans can be limited to 5 per cent, and that 90 per cent or more of money loaned can be expected back within five years after the borrowers depart from college.

## *The Use of TV as a Teaching Medium*

... has been discussed in general terms, but nowhere has adequate attention been directed toward its effective use in terms of proper equipment and facilities. In the April issue we shall present a special portfolio on employment of television teaching prepared by a quartet of experts in the ETV field.

**Through new style of orientation program  
this small college is convinced that**

## **Freshman Casualties Can Be Cut**

**ROBERT W. BROWN**

Director of Public Relations, Adrian College, Adrian, Mich.

IT WAS ONLY AN EXPERIMENT; IT might never happen again, but, on the other hand, something took place at Adrian College, Adrian, Mich., that might spread to the campus of every small college in the country. What started out as an idea could become the No. 1 selling point of the nation's struggling small colleges.

While the age-old argument goes on as to whether the small college or the large university provides the student with the better education, President John H. Dawson of Adrian and his staff have concentrated much of their planning toward a problem which, along with the weather, has been the topic of much discussion but little more. As Dr. Dawson presents it: "The question is not only what type of school offers the student the better education, but at what college or university will the entering freshman have the better chance to adjust to his new situation and at what school will he find the proper counseling and attention to enable him to become a college graduate instead of a freshman casualty."

In the years ahead more students will make application to college, more students will be living away from home. To our nation's institutions of higher learning this must mean a remodeling of the guidance and counseling techniques; better planned freshman orientation programs; new methods of easing the high school graduate into the rôle of college freshman. Failing in this, we will have *more* students dropping out in the early stages of their education because of improper adjustment.

It is not an easy thing for a young man to leave home with ambitions of becoming a doctor only to return six

months later as a freshman failure. Yet this happens to thousands of young men and women each semester. According to their high school records, these young people are capable of doing college work. Something happened or maybe something didn't happen.

### **NEW ORIENTATION PROGRAM**

Firmly convinced that the first week of college is the most important week of a student's four years on campus, Adrian College for almost a year worked on a new type of orientation program. Called the "Freshmen Welcome Days" the program was put into action last

September. As President Dawson told Dr. Lewis Brumbaugh: "Dean, build a freshmen week program that will make every new student feel like 'somebody' and then mold them into a class that will act and remain as a unit in the years ahead." Thus was born Adrian's first freshmen camp. Here's how it works.

Each incoming freshman was notified to bring enough clothing for two days and nights of camping. Arriving on campus Sunday, September 9, the freshmen and their parents were introduced to the week's activities ahead. The camping program, its purpose and aim, was carefully explained. Monday

The 115 freshmen who, along with 17 faculty counselors, spent two days



# ADRIAN COLLEGE

## WELCOME DAYS



September 9 - 14th, 1956

through Tuesday afternoon was devoted to a freshman testing program composed of five tests, the findings to be used by the counselors in assisting the new students in their selection of classes and careers.

Following the tests on Tuesday, freshmen and faculty alike, with swimming suits and fishing gear, boarded chartered buses for Judson Collins Methodist Camp on Wampers Lake, located 20 miles from the college campus. There 115 freshmen, 17 faculty counselors, and 14 junior counselors (outstanding upperclassmen) settled down to two days and nights of eating together, counseling together, swim-

ming together, and just plain getting to know one another.

### LEARN ACADEMIC DEMANDS

Daytimes were spent in private counseling sessions, planned recreation, and good eating. Woven into the activities were special talks covering various phases of college life. Such topics as "How to Use the College Library," "Proper Dress and Manner of a College Student," "How to Register" were discussed by faculty members. Dean Brumbaugh introduced the new students to the academic demands of college.

Everyone from the college president to the shortest freshman was housed

and nights together as a group before classes began at Adrian College.



in cabins with a junior counselor assigned to each freshman cabin. Lights out was at 10 o'clock, but the question and answer sessions between junior counselors and counselees went on into the night.

Picture the college chaplain, Dr. Howard Emrick (former football star under Bo McMillan at Geneva College) throwing a touchdown pass to Robert Bliss, assistant to the president. As one freshman put it in viewing the faculty freshman football game: "Even with all those degrees floating around, they are regular guys."

The evenings, like the days, were carefully planned six months ahead. Following dinner a short talk on some phase of college life took place. This was followed by faculty and freshman talent shows, folk dancing, and social dancing. If there is a better way for new students to become acquainted with other new students than through folk dancing, it will have to be proved to Adrian's 115 freshmen. What probably knitted the 1956 freshman class together more than anything else were the fireside "sings" on the beach each night. Here, circling a high bonfire, the freshmen learned the "Alma Mater" while roasting weiners and marshmallows. To see young men and women from all over our nation as well as from Japan, Greece, Hawaii and Cuba joining together to sing such favorites as "Hole in the Bucket," "Dry Bones," and the "Battle Hymn of the Republic" is truly a sight to behold. No longer were they strangers; here was a unit, a freshmen class intact.

How did such an evening end? As the fire reached its peak, so also did the evening program. Led in prayer and a closing college hymn by the college president, a day long to be remembered by those present was brought to an end. There were two such days, and who can truly say how valuable they were! This, however, is now known—no freshman class in the history of Adrian College was better prepared to register for classes and more eager to get into the swing of college life. The only thing green about these freshmen are the beanies they wear.

Donations from townspeople and a \$5 charge to each freshman financed the program, which included chartered buses, six meals, two nights' lodging and entertainment expenses.

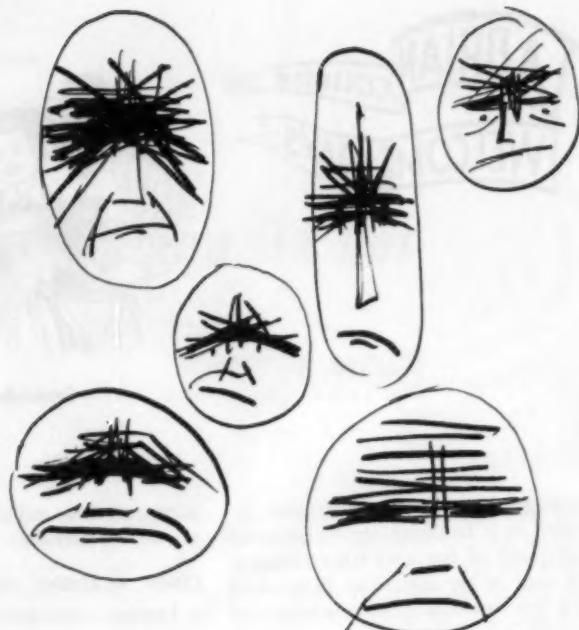
It was only an experiment, it might never happen again, but already new plans are under way for next year's freshman camp.

You may have to go  
more than halfway in

## Getting Along With Faculty

**GWENDOLYN L. TAYLOR**

Controller, Reed College  
Portland, Ore.



*These faculty grumps can be changed*

IN CONSIDERING FACULTY-BUSINESS office relations, it is easy to think of ways in which the faculty could and should cooperate with the business office. At Reed College faculty members could be more consistent in turning in purchase orders for material acquired on their own. They could get student payroll information in on time. They could let us know of events requiring special janitor services more than a half hour in advance. But we can do very little to change them. We can only try to understand them and their teaching problems and change ourselves so that we can get on with the main job of working with students toward the goal of an education.

### RELATIONS CAN BE PLEASANT

Relations between the faculty and the business office can be pleasant and mutually profitable or they can be irritating and frustrating. It is a two-way street, but I believe the business office must take most of the responsibility for making these relationships pleasant and profitable. Its stake in the result is higher. I see two special reasons for this: The business office is a service

organization whose only reason for being is to assist others in doing a job. *Antagonism* and *assistance* make a poor team. It is possible to help someone in an atmosphere of irritation, but the going is rough. The assistance is much more effective and the business office is doing its own work much better if both parties to the transaction are happy in the process.

The second reason the business office has the greater responsibility for developing good relationships is more subtle and difficult to express: It lies in the fact that the profession of college business management is relatively new, is seeking to raise its own standards, and is working to achieve recognition for its place in the academic world. We must prove our value as something more than managers of clerical and custodial duties. We must show that the proper conduct of college business affairs contributes vitally to the success of the teaching program. To do this it is essential that we maintain harmonious relations with the faculty. It is essential that faculty members think of us as valuable helpers and not as obstructive nuisances. Now, how do we achieve this desirable result?

Faculty people react to much the same stimuli as other people. A genu-

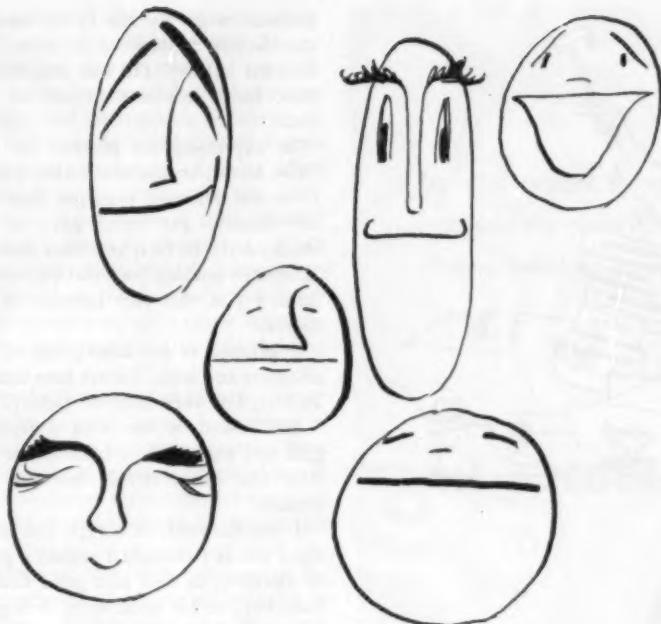
inely friendly attitude and a true desire to help and not to hinder, freely and frankly expressed, will work wonders.

Reed College has an enrollment of around 600. Our faculty is approximately 75 and our physical plant is small enough so that most of the group see one another at least casually almost every day. If I put on a broad smile and speak warmly at each of these meetings, I usually can win an answering smile. After we have exchanged smiles and greetings several times I find that I really like the guy. I don't know what his reactions are but, since I like him a lot, I want to help him in any way I can. Next time he comes into the office I greet him as a friend and invariably I get a friendly response. Then we can get down to the matter of how the business office can serve at this particular time.

### WORKS IN SMALL SCHOOL

I know it sounds corny, but it does work. How much it would work in a large school where opportunities for personal contacts are fewer, I don't know. It's harder to express a warm friendly attitude toward people you seldom see. Bulletins and group meetings become necessary means of communication, and they are never quite

From a paper presented at the Western Association of College and University Business Officers, Tucson, Ariz.



*to faculty glads by a little patient cultivation.*

as effective as a person-to-person discussion. The idea is sound though and, if applied to each segment of the organization when opportunity occurs, a feeling of friendliness gradually will spread throughout the whole group.

#### COFFEE BREAK FRIENDLY AFFAIR

In our school the coffee break every afternoon has become a means of developing understanding and friendliness between faculty and clerical staff. A tiny Pullman kitchen was built in a closet off the faculty lounge. The office girls take turns making coffee for the group.

Supplies are purchased out of voluntary contributions. A money jar is set out prominently on the tea tray and those who come for refreshments drop in a nickel or a dime. We have had no difficulty in collecting enough to buy tea, coffee, sugar, cream and occasionally cake or cookies. We also have been able to replace the old dishes originally donated by the College Commons with a new set.

Most faculty members who have classes and offices in Eliot Hall come around at 4 o'clock for tea or coffee. The girls from the various offices are encouraged to go in for their coffee break. Everyone gets better acquainted, and it turns out to be a wonderful op-

portunity to get answers to questions, to learn about changes in schedules and policies, to waylay absent-minded professors who forget to turn in necessary forms, and so forth. Each one washes his own cup and saucer. On the whole, it is no more time consuming than a trip to the coffee shop, and the resulting good will between teaching and nonteaching staff is gratifying. By getting to know one another better, we work together more effectively.

In its work with faculty and staff one of the most helpful things the business office can do is to eliminate as much red tape as possible; to use no more forms than are necessary, and then to explain their purpose and utility whenever an opportunity is offered. If people understand the why of a particular procedure, they are much more willing to cooperate. We must be flexible, for the system was made for the college, not the college for the system.

It isn't always necessary to insist that a special printed form be used. Often a sheet of plain paper bearing the appropriate signature authorization is more convenient and just as suitable for bookkeeping purposes. I always get it in writing, true, but many times I write a letter to myself telling

me what to do and then present the letter to the faculty member involved for his signature. It is less wearing on both of us than for me to insist that certain rigid forms and procedures be followed. Yes, it is usually easier to change yourself and your ways than to persuade the other fellow to conform. And I always take the easier way if at all possible.

Quite often a fine spirit of cooperation can be developed by asking the advice and enlisting the aid of various faculty members in matters that are often thought of as belonging more especially to the business office. Examples in the field of building maintenance come most readily to mind.

Last year we budgeted a certain sum for repair and replacement of blackboards. Unfortunately, it was not large enough to enable us to do a thorough and complete job. So, at the coffee hour, I buttonholed a professor from the mathematics department and one from the language department and asked what they thought about the blackboard situation. They had thought plenty—some of it not too complimentary. I told them what was in the plan, and we then and there made an *ad hoc* committee for the inspection and improvement of blackboards. I learned which boards were used most and which were most in need of replacement. They realized that I was trying to improve teaching tools; they were pleased at being consulted, and they were more sympathetic with my efforts to make a small budget do a big job.

We recently decided to register students in September for a full year and to eliminate the between-semester break. This meant changing certain registration procedures, rewriting parts of the catalog, and changing our arrangements for tuition payments. I planned a meeting with the registrar, the director of admissions, and the dean to discuss these changes and make sure we were all working along the same lines. All these officers were aware of the need for such a meeting and came together to thresh the thing out as a matter of course.

#### FACULTY INVITED TO MEETING

Also I invited three faculty men who had been most interested and active in administrative affairs, although the subject for discussion did not really concern the academic program. Their presence in this group brought out many helpful ideas that



A frank discussion of the budget with each department head helps to get the most for the least money. We keep the records in the business office but the genuine control is exercised by the department head himself when he is kept fully informed as to the state of his budget. There's no overspending at Reed.

we incorporated advantageously into our plans. More important still was its effect on them. It was obvious as the plans were crystallizing that these teachers were learning a good deal about the numerous and pesky little problems presented to the business office by such a change in the established customs. They will be much more helpful themselves and will do a great deal more to interpret the business office to their colleagues on the teaching staff than would have been possible had they not joined us at that meeting.

#### WANT MOST FOR LEAST MONEY

We are all really working for the same thing—how to get the most for the least money. A frank discussion of the budget with each department head helps toward that goal. We keep the records in the business office but the genuine control is exercised by the department head himself when he is kept fully informed as to the state of his budget.

At Reed College, overspending is bad form. It just isn't done. In the business office we put up the road signs but the brakes are applied by the drivers, namely, the faculty itself. This is the way it should be, and this

spirit is fostered by, and in turn helps to foster, a good cooperative relationship between the faculty and the business office.

#### ATTENDANCE BY INVITATION

The nonteaching staff is also on the team and should seize every chance to play in the game. The faculty must make this possible, but there is such a thing as taking full advantage of every opportunity. Attendance at faculty meetings and working on committees is usually done only by invitation, but we can accept every invitation and work especially hard to make a significant contribution whenever possible.

Attendance at social functions and support of college activities shows an interest in the college and its development beyond the requirements of the job. By cultivating and displaying such interest the business office staff can improve its relations with the faculty and increase its over-all effectiveness.

Walking across the campus one day with a new faculty member, I was asked when payday was. I answered that it was usually the last day of the month but, since a short vacation was scheduled to start on the 28th, we

planned to get the checks out early so that faculty could have its money before the holiday. He was delighted to have funds available before his free time.

In expressing his pleasure he said, "You know, in the institution I came from the business manager hated all the faculty. He never gave us our checks early. In fact, he took a macabre delight in holding back our pay checks until 5 p.m. the very last day of the month."

I laughed at his description of the situation and said, "I don't hate faculty. In fact, I'm very fond of faculty."

He looked at me with a friendly grin and answered, "I believe you are. And one can certainly feel the difference."

I was flattered, of course, but interested too as I thought I sensed a grain of sincerity, as well as a good deal of malarkey, in his little story. I hope I was right in feeling this sincerity; it certainly is the way faculty and the business office should feel about each other.

So here is my little collection of platitudes—nothing very new, and certainly nothing profound.

1. Keep in mind the main job to be done. That main job for the business office is not the keeping of records, the maintenance of buildings, or the purchasing of supplies. The main job is to relieve the professors of routine tasks and to provide an atmosphere where scholars work together in the never-ending search for truth.
2. Remember the golden rule. Friendliness begets friendliness. A genuine desire to be helpful, frankly expressed, always wins a similar response; a sincere attempt to understand the other fellow's point of view usually results in an opportunity to present your own. In such an atmosphere a meeting of minds is nearly always possible.
3. Faculty members are people, not disembodied intellects; they have personal desires and needs, pet notions and pet peeves, triumphs and frustrations even as you and I. They will respond in much the same way. Admiration and appreciation always please and generally bring about increased cooperation.

You may have to go more than half-way in this matter of getting along with faculty but, if you are not afraid to take the extra steps, the rewards will be well worth it. The relations between faculty and business office will be satisfactory.

ACCOUNTING PHENOMENA OF SEEMingly opposing tendency may be observed in the accounting practices within the business offices of growing colleges and universities. Whereas, on the one hand, a trend toward decentralization of central accounting detail work is taking place, on the other hand, a trend toward strengthening central controls is transpiring. What seem, upon the first look, however, to be trends of contradictory nature resolve themselves, upon closer examination, into natural counterbalancing forces.

At the University of Illinois' Urbana campus, new and recent happenings in business office accounting that are parts of the trend toward decentralization are as follows: the creation of the position of divisional chief accountant for the college of agriculture, and the transfer of the entire accounting for encumbrances from the central office to college, departmental or divisional offices.

The first event probably is greater in scope than is the second. Though encumbrance accounting is a big and essential part of governmental or institutional accounting, the activities of the college of agriculture are statewide and in some cases national and international in scope and require highly accurate accounting for federal, state and revolving fund monies.

Older examples of the same decentralization tendency of accounting detail work fall into three groups as far as age and/or type of change are concerned.

Our first known accounting separate from but controlled by the central business office was that for physical plant jobs. The student hospital, an auxiliary enterprise, received a business management about 17 years ago.\*

Then in the early 1940's, the second group of decentralizations for business transaction details took place: The new student union, first, and next, the housing division began to operate their own accounting systems. At the central business office these are represented by control accounts only.

The third group of decentralizations took place mainly in the colleges of applied sciences and covers a wide span of time in terms of evolution. This group of changes puts emphasis upon expediting business procedure, especially in connection with

\*Credit is given Stanley C. Smith, auditor, for certain University of Illinois historical references in the article.

**Do the trend toward decentralization of accounting detail work and the trend toward strengthening accounting controls lead to**

## **AN ACCOUNTING PARADOX?**

**A. E. MARIEN**

*Accountant, University of Illinois, Urbana-Champaign*

**Recent happenings in business office accounting at the University of Illinois constitute the basis of this discussion of the counterbalancing forces at work in many large colleges and universities today.**

research contract purchases. It covers the following positions: laboratory management, chemistry and chemical engineering department of the liberal arts and sciences college; laboratory management, physics department, and laboratory management, electrical engineering department, both of the engineering college; and research program administrative assistant, digital computer laboratory of the graduate college. A fifth laboratory management was recently filled in the theoretical and applied mechanics department of the engineering college.

Various business activities are performed by the laboratory manager; however, in the positions in the electrical engineering department of the graduate college and the theoretical and applied mechanics department, many of the business duties are in relation to federal and industrial research contracts.

The seeming contradiction in this decentralization process is the trend toward strengthening central controls. Tightening of controls is evidenced by the relentless advance of machine accounting and by the numerous systems

and procedures studies made by the internal and external auditing staffs. The work of the internal auditors is supplemented, of course, by the cooperating efforts of other staffs of the university. In machine accounting the very programming for different areas of accounting practice involves, per se, a refinement of accounting procedure. The writing, and constant revision, of a business policy and procedure manual is another part of control strengthening.

New examples of our decentralization process might be mentioned. Emphasis upon a more accurate detailed accounting of agricultural transactions at the University of Illinois College of Agriculture took shape in the school's fiscal year of 1953-54. The assistant auditor of the university was elevated to a new position in the college of agriculture entitled "division chief accountant." The responsibility of the new position is to systematize sufficiently the accounting for expenditures to keep expenditures within the limits of state appropriations, federal grants, and revolving fund income. The genius of the business machine was commandeered even in this event of decentralization. Greater central control, it is to be noted, also was being realized.

#### CENTRAL PURCHASING DIVISIONS

Transfer of encumbrance accounting to the college and other offices of the Urbana campus was begun in the latter part of the 1952-53 fiscal year. Though the event is a departure from a fundamental principle of governmental accounting, the same trend may be noted in some large universities. The chief factor in making it feasible for colleges and departments to record their own encumbrances is the existence of a central purchasing division within the business office. If the individual colleges were allowed to purchase directly from outside vendors, encumbrance accounting still would be an essential phase of central accounting in order to achieve adequate control. The transfer of encumbrance accounting detail from central accounting has compelled departments to be more critical in their own analyses of appropriation balances.

Revision of the account ledger sheet followed decentralization in encumbrance accounting. Columns formerly used for recording encumbrances were eliminated. The "expenditures" column now is used for all classes of expense, including salaries, wages and equipment. Because separate ledger sheets

had been used previously for the last named items, it was possible for the new ledger sheet to give the unexpended cash balance of a particular department for all of its appropriation items. The expenditures column on the revised account was placed first on the left since the volume of expense postings is greater than that for credits. Finally, the new ledger sheet is produced by business machine processes.

Though the accounting for encumbrance detail was moved out of the central office, certain encumbrance type of controls in that office were instituted. One such control is a monthly summary of account balances for each college and the per cent of each original appropriation spent to date.

#### PREVENTS END-OF-YEAR SPENDING

Another such control is that each account is allowed to carry over to the following fiscal year expenditures amounting to 5 per cent of its appropriation. This ruling, besides providing a margin of safety, prevents an end-of-year rush of spending appropriation balances that in some cases are nonexistent because of encumbrances that for various reasons were overlooked. During the first complete fiscal year of decentralized encumbrance accounting, 1953-54, account overdrafts were relatively few compared to those of previous years.

In seeming contradiction to the foregoing, new and recent examples of decentralization of accounting detail work are evidences of the trend of central control tightening. Perhaps the foremost incidence of this trend from the point of view of accomplished results is the mechanization of central accounting practices. Examples of mechanical accounting procedure at the University of Illinois are in the areas of student fees, payroll, budget, stores inventories, and basic accounting transactions. In the last named area, all accounts are coded according to fund and type of account and are listed in a code book. Vouchers have been redesigned to facilitate card punching. Posting data are printed and summarized on the punched cards.

The next adventure in automation was checkwriting for vouchers to be paid from local funds. Two connecting machines capable, however, of being used separately—one a card punching machine and the other an electric typewriter—make it possible not only to write the check for the voucher to be paid but also to punch a master card

at the same time. Checks for vouchers approved for payment are written and processed within an amazingly short time after receipt of the voucher from the purchasing division. Check-register recording, posting and bank reconciliation are facilitated greatly through the punched cards.

In the reconciling process, the bank sorts and lists all checks (the mechanically written kind, of course) debited to the university's account for a particular month. The canceled checks returned by the bank then are collated with the cards punched by the accounting division for checks written during that month and for checks written but not yet cleared in previous months. The unmatched cards represent outstanding checks, and preparation of the bank reconciliation is thereby speeded up greatly.

The connecting card punch and electric typewriter is used also for payroll checkwriting on local funds. Thus far eight budgetary positions in the accounting division have not had to be filled as a result of automation. The significance of the foregoing in relation to control tightening is that continuous programming of accounting procedure for mechanization forces a step-by-step review of existing procedure and a resultant strengthening of controls.

#### PART OF ANNUAL AUDIT

Likewise indicative of the trend of control tightening are the many procedural studies conducted at the university. The outside auditors review the system of internal control as a part of their annual audit. They also are occasionally asked to make a special report on procedures in a particular area. As a consequence of their procedural reviews, many controls are strengthened. Control strengthening of receivables, fee rebates, and agricultural sales are either under consideration or are accomplished by the affected staffs and the cooperating auditors.

A special study by the systems man of the internal auditing staff concerned car pools. As a result of his work, the agricultural college car pool and the physical plant car pool were combined into one pool of 119 cars, effecting the many efficiencies of such a combination.

Closer examination of the examples of the two trends reveals that the apparently paradoxical phenomena pointed out at the beginning of this article are natural concomitants of in-

stitutional growth. In other words, along with the historical growth of a college or university, there will be noted the tendencies of decentralization of accounting detail work and the strengthening of central controls. An interesting factor in connection with the decentralization tendency is that, in the earliest stage of college and university growth, there is a semblance of decentralization in business practices before the subsequent stage of centralization is reached.

The decentralization trend is the reason some contend that in a large institution the dean or assistant dean in charge of a college's business transactions should be trained in governmental or institutional accounting. Or, if a governmental accounting specialist is appointed for that responsibility, academic administrators or administrative committee members will have only academic policy decisions to make and, as a result, will have more time for research, teaching and extension work.

With more nearly accurate budgetary and business facts at hand, the administrator also will be able to make academic policy decisions with greater speed, further releasing his time for purely academic pursuits. Perhaps relieving academic people from business duties would make college administrative positions more attractive.

A too frequent campus occurrence is that of an administrator "stepping down" to research and teaching but probably "stepping up" as far as being true to himself is concerned. Indeed, Shakespeare was correct philosophically when he wrote: "This above all: to thine own self be true." This is the reason for the admonition "Know thyself." After all, an academic administrator may have neither the training nor the inclination for the complexities of business and finance—this, in spite of the fact that the old-fashioned, introverted type of professor seems to be disappearing from the American scene. But if it is important to have an academic man in the administrator's chair, his purely business duties should be either made easier or transferred to a specialist, in planning for the process of decentralization in business practices.

The decentralization trend along with its natural coexistent trend of stronger central controls will continue, especially in the light of anticipated college and university expansion. Additional establishments—for instance, the

laboratory managerships referred to earlier—under which purchasing detail and expediting are performed at the departmental level can possibly result in years to come in a smaller central purchasing office with greater purchasing controls.

Since these trends are certain, they should be guided by the administration. Caution should be exercised to prevent a growth trend from skewing in the wrong direction. For instance, decentralization to the point of reducing central administration to an unimportant rôle would be unfortunate, especially if a skew in the trend of

central control strengthening is attendant also.

Therefore, adequate guidance for trends resulting from growth should be provided through a preplanning program. In this case, which concerns the business and financial affairs of a college or university, such a program should be steered by the business administration of the institution. The University of Illinois has made a start in this direction by appointing a co-ordinating committee on business machine procedures. This committee has a representative from each division of the central business office.

### Three Sunday Meals at Michigan

Dear Editor:

It seems to me that your magazine has shown extremely poor judgment in publishing misstatements or—should I say?—unverified newspaper articles. I refer specifically to your editorial entitled "Food Service Problems" on page 18 of your January 1957 issue.

In my opinion, the least you could have done was to spend 3 cents on a stamp and check with me as to the correct story instead of accepting the article which was published by the various Detroit newspapers. The source of the articles in the newspapers was a half dozen immature, irresponsible and sensation seeking resident students who, I hope, are happier in their present quickly found accommodations than they were in our residence halls.

For your information the actual menu served which, your article claims, caused the disturbance is shown below:

Chicken gumbo soup, crackers  
Corned beef and Swiss cheese  
on leaf lettuce  
Mustard and mayonnaise  
Salad (fruit cocktail in lime  
gelatin on leaf lettuce)  
Assorted breads and butter  
Pineapple-graham cracker  
refrigerator dessert  
2 glasses milk      Tea

Possibly, as your article stated, this menu "does seem to be somewhat short of dietary balance and

imagination," but to me it looks like a pretty fair supper after a big dinner consisting of:

Baked ham, cherry sauce  
Brown parsley potatoes  
Frozen green beans  
Pear half with blueberries  
on lettuce leaf  
Rolls, butter      Flavor ice cream  
Coffee, tea, milk

I should also like to mention the breakfast served that morning, which was:

Fresh orange juice  
Assorted dry cereals  
Pancakes, sirup  
Toast, jelly      Brown sugar  
Coffee, tea, milk

Further, I would like to assume, of course, that paragraph three of your article ("College administrators should not view with indifference any widespread criticism of the food service. Prompt investigation should be made and inadequate service and food and improper sanitation should be corrected immediately") is not directed toward the University of Michigan. Possibly your readers will take for granted that it is.

May I suggest that the readers of your magazine are entitled to actual verified facts. They can always get the unverified sensation stories out of our daily newspapers.

Leonard A. Schaad  
Business Manager of  
Residence Halls  
University of Michigan

*Mr. Schaad's assumption in regard to paragraph three is correct. The editorial's note of warning was not directed toward any specific institution. — EDITOR*

# ATHLETIC CENTER

Under a lamella roof: the gymnasium

Under the open sky: swimming pool, playing courts, parking lot

**WESLEY HERTENSTEIN**

*Director of Physical Plant, California Institute of Technology, Pasadena*

AFTER TWO YEARS' OPERATION THE new athletic center at the California Institute of Technology has exceeded the expectations of the athletic department as well as the designers.

The athletic center in Tournament Park includes the Scott Brown gymnasium, alumni swimming pool, outdoor playing courts, necessary parking lots, and other athletic facilities. The engineering office of the buildings and

grounds department had made many tentative layouts. Pereira and Luckman, consulting architects, were asked to make schematic studies of such a facility to accommodate the institute's athletic program.

The college has an enrollment of approximately 1000: 650 undergraduates and 350 graduates. Twenty per cent of the undergraduates participate in intercollegiate sports and 60 per

cent in intramural sports. Most of this takes place between the hours of 4 and 6 p.m. To design a complete and adequate plant to meet the needs of such a program in accordance with rigid institute standards of construction seemed almost impossible.

However, Pereira and Luckman, after careful study, gave assurance that such a plant could be built within the limits of the funds available. Smith,

*General view of California Institute of Technology's new athletic center.*





This view of the lamella roof in the main gymnasium shows heating and ventilating housing.

Powell and Morgridge (then Marsh, Smith and Powell) were employed as architects to handle the architectural and structural drawings and specifications. The buildings and grounds staff, under the direct supervision of Ernest B. Hugg, assistant superintendent, and James B. Taylor, supervising electrical engineer, prepared the drawings for the mechanical, plumbing and electrical portions of the work. The com-

SUMMARY OF PLANT COSTS AND BREAKDOWN OF GENERAL CONTRACT

General contract .....	\$440,626
Utilities .....	8,000
Yard work (storage shed, outdoor playing courts, trees, planting). . . . .	20,000
Equipment (bleachers, lockers, office equipment, backstops) . . . . .	45,000
Architectural and engineering fees . . . . .	35,000
Clerk-of-the-works, tests . . . . .	5,000
Contingency .....	21,374
TOTAL .....	<u>\$575,000</u>

Alumni swimming pool, showing campus buildings in the distance.





bined efforts of the two architectural firms, Harold Musselman, director of athletics, and the engineering staff of the buildings and grounds department produced plans for the layout.

On the basis of their low bid, Escherich Bros., general contractors, were selected to build the Scott Brown gymnasium, locker rooms, alumni swimming pool, utilities from the main campus, and a portion of the parking. A summary of the entire plant cost, together with a breakdown of the general contractor's bid, is shown in the table on page 35.

#### PLEASING CONTRAST

Students coming from the campus enter the center through the north doors and entrance lobby. This entrance is aluminum clad and makes a pleasing contrast to the stained concrete panels and large bowl-like north wall of the gymnasium, which is of painted exposed concrete. The lobby floor is of asphalt tile, walls are of Douglas fir paneling, and the ceiling is of acoustic tile. The lobby contains a trophy case and ticket selling booth and is adjacent to the public restrooms.

The area to the right of the lobby contains the offices of the athletic director, his staff, and several coaches. The walls of these rooms are partially of natural finish Douglas fir panels and partially of plaster painted a soft fawn color. Ceilings are of acoustical tile with radiant heating coils above. The north walls have large clear windows that look out on the turf of the play-

ing fields to the campus and the San Gabriel Mountains beyond. This wing is separated from the locker rooms by a 12 inch concrete wall that is a complete sound barrier.

The gymnasium floor is reached from the lobby by two corridors, one leading to each end of the main floor. This permits spectators to enter or leave from either side without walking on the playing floor with street shoes. The floor is 96 by 115 feet.

The roof is of "lamella" construction, consisting of 3 by 18 inch spec-

cially shaped segments forming an arched support having a spring line of 11 feet and a maximum rise of 36 feet above the floor. The end thrust of this system is taken at one end by the concrete walls and roofs of the adjoining rooms and at the other end by seven concrete buttresses that terminate in the ground and enhance the beauty of that portion of the building.

Lighting consists of 42 thousand-watt fixtures that give approximately 40 footcandles on the playing floor. Walls are painted concrete and

A thousand steel lockers are provided in this room with an 18 foot ceiling.



Douglas fir paneling. High on each side are mounted the fans and radiators that supply the room with its heating and ventilation.

The floor is of maple finished with a dull sheen by application of a penetrating oil. This type of finish has proved highly desirable because of its anti-slip factor, low specular reflection, lack of shoe burns, and ease of maintenance. The floor is supported on three layers of 2 by 3 joists laid criss-cross to make it resilient. These, in turn, rest on a concrete slab on grade. The entire floor structure and substructure are kept at room temperature and humidity by means of forced ventilation. To date, no cupping of the floor has been observed.

The floor has superimposed upon it markings for one 94 by 50 foot inter-collegiate basketball court, two 80 by 48 foot practice basketball courts, three volleyball courts, and four badminton courts. The basketball backboards are of glass and plywood, respectively, and are supported on movable mounts that are exceptionally sturdy when in playing position. Movable bleachers that will accommodate a thousand spectators are installed on the north and south walls.

#### 1000 LOCKERS PROVIDED

The locker room can be reached from the corridor, the main lobby, or the main gymnasium floor. Access to this room also is available directly from all the major play areas and swimming

pool. It has an 18 foot ceiling and large high windows on three sides. A separate ventilation system is provided for this room. Its appearance is light and airy. The surfaces are all concrete painted in two tones of taupe and accented here and there with deep royal blue. A thousand steel lockers are provided with concrete curbs.

The locker room is surrounded with an equipment room, stock room, student athletic manager's room, drying room, toilet rooms, showers, faculty dressing room, and visiting team room. Available from the locker room or the main entrance lobby is a classroom for 30 students, which is used for health talks, chalk talks for teams, committee meetings, and related purposes.

#### THREE ENTRANCES TO POOL

The alumni swimming pool is located to the west of the gymnasium and has three entrances, one from the locker room and two from the playing field. The pool is 60 by 75 feet, varies in depth from 3 feet 6 inches to 12 feet, and contains 270,000 gallons of water. The 12 foot deep water, extending over an area of 40 by 60 feet, is used for water polo and diving. The pool is surrounded with a deck and a 9 foot high concrete wall of tilt-up construction.

The deck surrounding the pool is of concrete, which is colored terra cotta red. It is scored with diagonally cut marks  $\frac{1}{2}$  inch wide and  $\frac{1}{8}$  inch deep,  $2\frac{1}{2}$  inches on centers. This scoring

provides a good anti-slip deck and one that is easy to clean and keep drained.

Pool surfaces below water are white plaster. Surfaces out of the water are lined with blue vitreous tile. The swimming lanes are defined by vermillion vitreous tile. The water surface, being exposed to the sky, has a beautiful blue tinge.

Illumination for the pool area is supplied by nine thousand-watt lamps mounted on three steel standards 50 feet high. Underwater lighting is provided by four thousand-watt wet niche fixtures.

The pool is heated by a steam heat exchanger, the condensate from which is emptied into the pool. Steam for the pool and all of the athletic center is supplied from the heating plant 2000 feet away through a 4 inch steam main, one-half of which is in the campus tunnel system and one-half is laid directly in the ground but insulated with an asphaltic product. A portion of the deck surrounding the pool has steam heating coils installed in it. The water temperature is maintained at 80° F. The pool is used in the winter and summer.

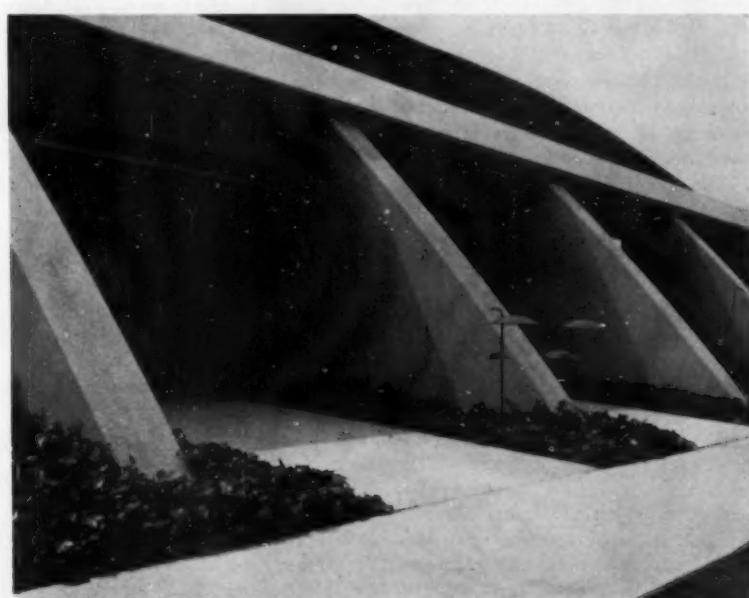
The water is filtered through two diatomaceous earth filters having a capacity of 600 g.p.m. These are 30 inches in diameter and 4 feet 6 inches high. Chlorine gas is used to control bacteria and algae growth. This filtering and chlorination equipment was designed to be weatherproof and was installed outdoors. The architect selected colors of contrasting hues for the various portions, while leaving some black and others aluminum. The effect is very pleasing to the eye.

The pool was opened the first summer for recreational and instructional swimming to Institute personnel and their families. The membership fees paid by these participants defrayed all the direct costs and made proper allowance for heating, lighting, maintenance and other items. The program was repeated last year on an enlarged basis with even greater success.

Outdoor courts for basketball and volleyball were constructed of asphaltic concrete and chain link fencing. Four basketball and three volleyball courts have been provided.

The parking lot was increased to 435 spaces. This serves a double purpose, being available for nighttime and week-end athletic events as well as serving the ever-present problem of student daytime parking.

East entrance showing detail of beam and buttresses supporting arched roof.





Above: Typical open stack arrangement on lower floors can be seen at right. Carrels align north-facing wall at left. Fluorescent lighting above desks supplements daylight through windows.

Below: Separate smoking lounge in the study center. Partitions do an effective separation job, yet do not hinder air circulation nor entirely rob inner sections of the room from natural light.



Making a virtue  
of a sloping site in

## Planning the Library

JAMES H. RICHARDS Jr.

Librarian, Carleton College, Northfield, Minn.

CARLETON COLLEGE, NORTHFIELD, Minn., long has been known as an educational institution emphasizing close student-faculty contact and the encouragement of individual initiative and thinking.

To implement that program, a centrally located library and study center has recently been completed. The new \$1½ million building fits its program requirements precisely. What's more, actual use of the building has "proved out" the months of study and research that went into the project.

The library as a gloomy, austere book storage center is becoming a thing of the past. The intention of President Laurence Gould and other college administrative officials was to create a new library structure affording adaptability to future needs and continuing ease of access. Heavy student use would be encouraged through the pleasant, inviting surroundings, designed to permit conversation and smoking in typical social activities, associated with good books.

These objectives have been carried out effectively in the new four-story library building which not only provides ideal study conditions for a student body of 1000 but also provides adequate storage facilities for 350,000 books. In fact, the building can handle normal expansion in book capacity for the next 50 years. Our library now has 150,000 volumes.

As far as pleasant, inviting surroundings are concerned, few college buildings could have a more ideal setting in which to achieve that objective. A sloping grade makes it possible for the building's main entrance from the street level to be on

the fourth floor, via a gently sloping ramp. This permits the bookstack areas—the building's "quiet" areas—to be on the first three floors. The top floor, then, is where heavy traffic concentrates and, consequently, is where study lounges, administrative areas, and the main lobby are located.

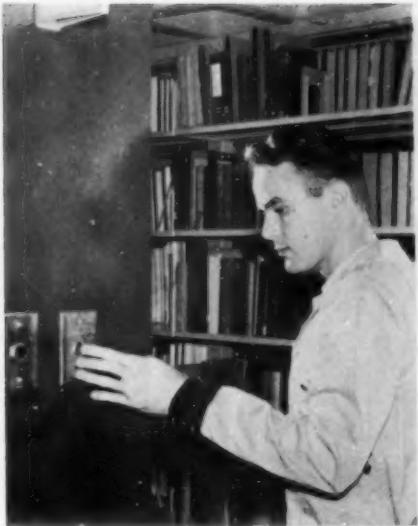
Although only the top two floors are above ground on the south, the same sloping grade provides four full floors exposed to a view to the north of Carleton's beautiful willow shaded Lyman Lakes. Wide window expanses take full advantage of the view without the disadvantage of sun glare during the greater portion of the day.

### SIMPLE, FUNCTIONAL BUILDING

In actual design and layout, a simple, functional building with good lines but no ornamentation was conceived as most suited to the site and the library's purposes by the architects-engineers, Magney, Tusler and Setter of Minneapolis. John Lindstrom, partner in the firm and project architect for the building, combined the unbroken floor expanses, informal furniture arrangements, and selective use of colors further to carry out the design objectives.

To provide warmth and dignity, Mankato limestone was selected for the building's exterior facing, and decorative stone was used in many strategic interior areas. A striking two-story window wall on the east side of the building in multi-colored glass and a colorful mosaic pattern in stone at the main entrance were selected as other decorative touches.

To carry out the design principles of informality and full accessibility to



Above: Time switch controls lighting fixtures in bookstack areas. Push buttons, strategically located at each stack bay, turn lights on within the area for a preset period, at present 12 minutes. At the end of that period, a time switch turns the lights off. Right: Card catalog section, inside the study center room on the fourth floor.

Below: Two-story high window wall for main stairway shows up prominently in this exterior view. COVER PICTURE shows interior view of window wall.



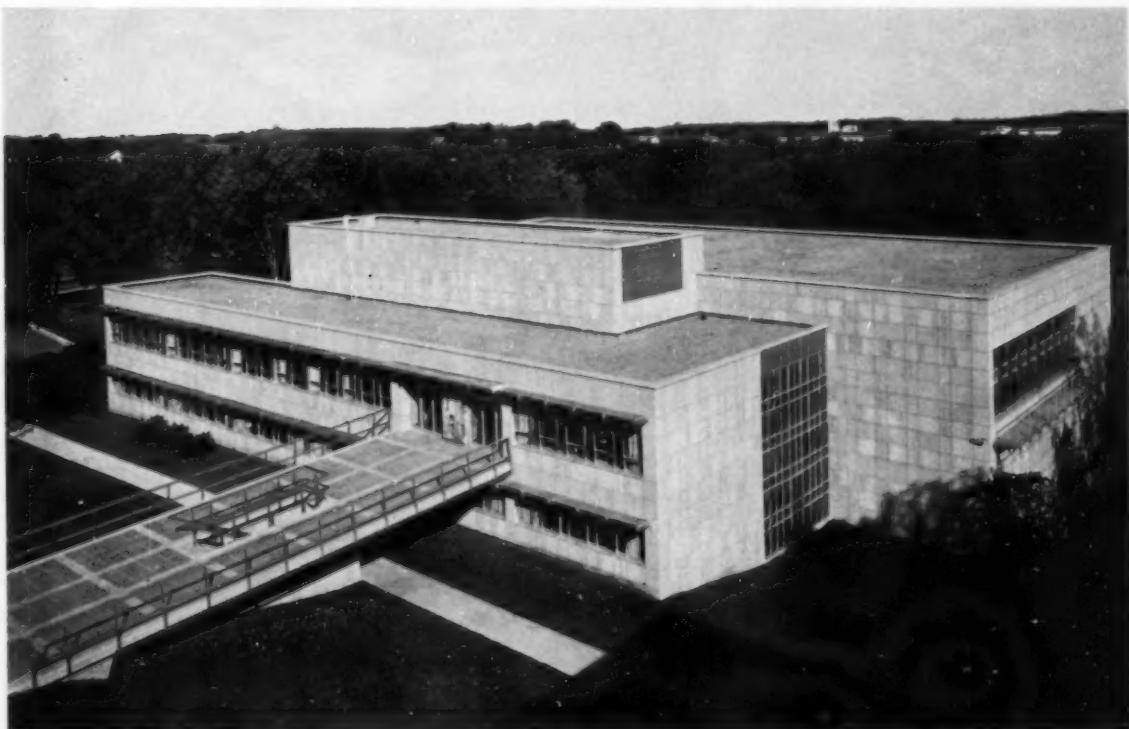
books, the open stack plan is followed on each of the lower three floors. Books, in stacks 7 feet high, are available to students on an honor basis. Stack areas are interspersed with study rooms, alcoves and table areas so that students can study and work with reference books and research material close at hand. On the three floors are about 90 carrels.

The first and second floors are almost entirely devoted to an arrangement of this type, but the third floor also has two conference rooms adjacent to the

bookstacks and five separate seminar studies available for staff conferences and student meetings. In addition, a soundproof room for music listening and a staff lounge with a kitchenette are provided.

On the fourth floor, entry to the building from the ramp is accomplished through a spacious lobby, the front entrance of which features a striking mosaic pattern, as well as an after-hours book return.

Beyond the lobby is the entrance to the main study center, which runs the

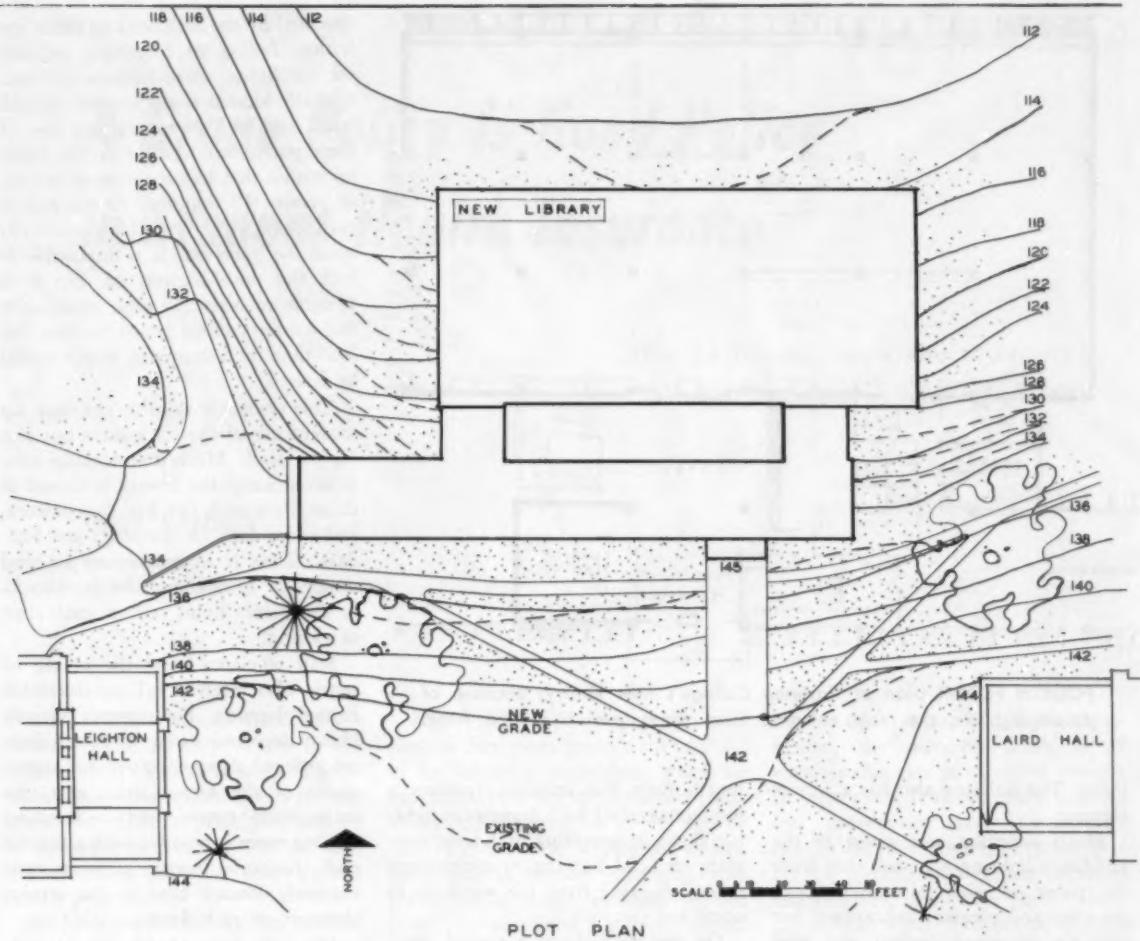




Above: A view to the east in the main lobby shows, at left, the main stairwell leading to the lower levels and, at right, the entrance to the recreational reading room.

Table at center provides display space for new books and other library exhibits. Floors are terrazzo. Below: the charging desk in the main lobby on the fourth floor.





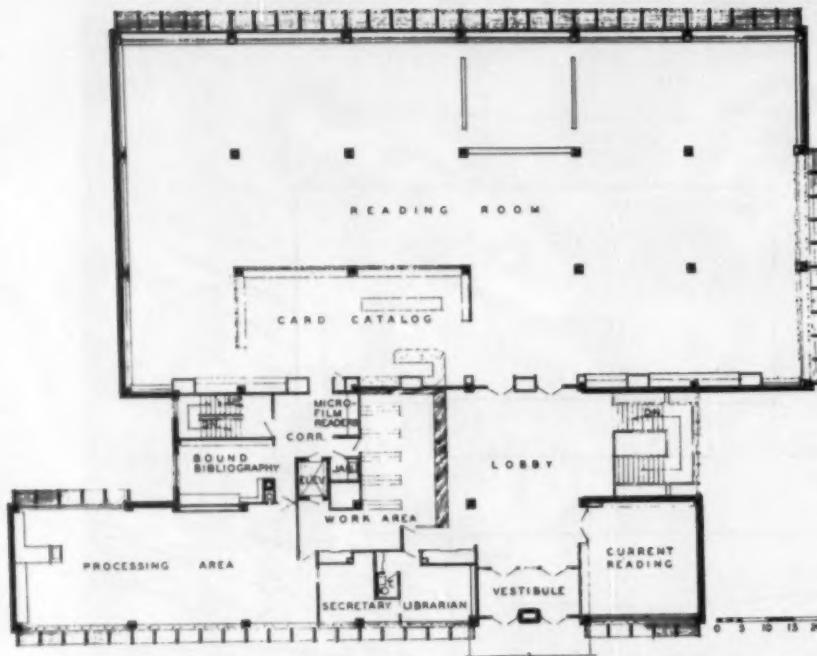
entire length of the building and again features wide window expanses on the north wall. The entire room is wood paneled; walls facing south, east and west have open shelves for magazines and books. There are traditional study tables as well as informal furniture groupings with easy chairs and divans, and one such grouping is set off with partitions to provide a smoking lounge. Throughout the room low book cabinets contain special reading and reference material.

To the left in the lobby is the charging desk, and a door to one side leads into the library's administrative section. This area includes offices for the librarian and his secretary, a book work and repair room, a microfilm reading alcove, and a bibliography room. To the right of the lobby is the main stairwell leading to the lower levels, as well as a room immediately off the front entrance devoted to recreational reading materials.

Atop the building is a one-story penthouse containing ventilating equip-

*Below: Over-all view of study center in Carleton College's new library and study center. Card catalog area is at the far left; the smoking lounge at far right.*





FOURTH FLOOR plan of Carleton College's new library. Because of its sloping site, the main entrance from street level is on this floor.

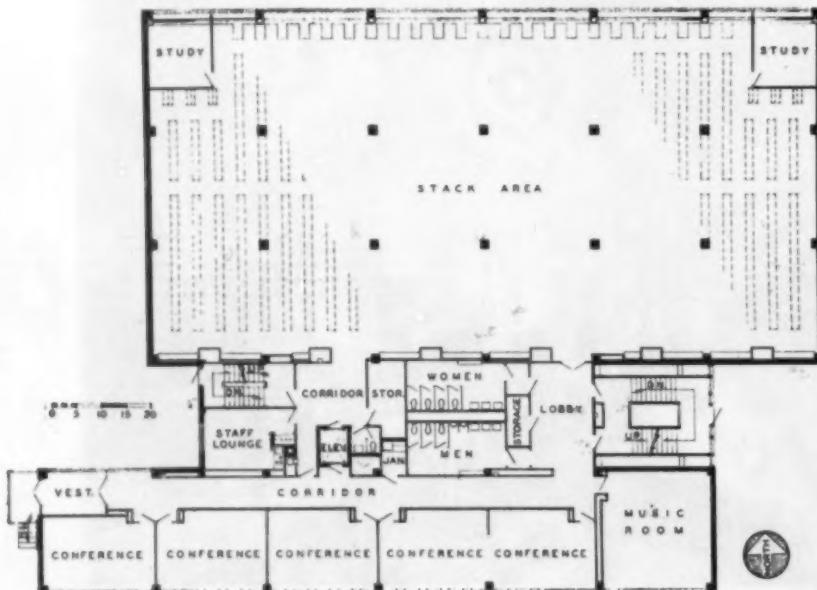
ment. The building also has a service elevator.

Much attention was given to the building's lighting plan, not only from the point of view of achieving an informal and pleasant atmosphere but also for increased student and staff efficiency. The study center on the

fourth floor, for instance, features a luminous ceiling with fluorescent lighting above it, providing high-level non-glare artificial lighting to supplement natural lighting from the windows to north and east.

On the stack floors a special automatic turn-off lighting system was

THIRD FLOOR plan shows conference rooms and soundproof room for music listening. Magney, Tusler and Setter, architects, designed the building.



specified by the architects to offset the human failing of forgetting to turn off the lights. Push buttons are strategically located at the corners of each stack bay, and depressing any one of these push buttons will turn the lights on within that area for a preset period, at present 12 minutes. At the end of that period, a time switch automatically turns the lights off. It is impossible to lock the push buttons on, but it is possible to reset the time switches at the master control board to alter the "on" time for a shorter or longer period as desired.

This system is valuable not only for student use of the stack areas but also for the staff. Much maintenance time is saved since the library is closed at three times each day five days a week, and twice daily on Saturdays and Sundays. Thus it is unnecessary to send somebody throughout the bookstacks to check for "lights out" at each time of closing.

Staff efficiency—and the saving of steps—also received full consideration in the planning. For instance, various library departments on the fourth floor are grouped together so that full supervision of the lobby, stairs, exit, the main study center, and recreational reading room is possible with a limited staff. Janitorial storage areas are conveniently located next to the service elevators on each floor.

Materials selected for the interior were chosen with an eye not only for attractiveness but also for durability and ease of maintenance. In heavy travel areas floors are terrazzo and walls are tile. In the study center there is a cork floor, while in other work areas rubber tile is used. Floors in the stack bays are of colored concrete. Plastic wall covering is used in several areas of heavy use, such as the third floor conference rooms, the card catalog section, and west stairwell. Completely interchangeable steel shelving was specified throughout the building.

The entire building is laid out on the modular principle (using modules of 4½ feet for all spacing of partitions, framing and so forth) so that future interior changes or relocation of partitions will be simplified greatly.

This, then, is the Carleton College library—a building dedicated to the objectives of providing a "home" for the 150,000 volumes now in the college's book collection; to making the study of literature both interesting and stimulating, and to encouraging the individual quest for knowledge.

# **A Group Policy Is Good Policy in Student Health Insurance**

**The desire to serve the students  
is always good public relations**

**DALE TANNER**

*Former Director of Insurance  
University of Illinois*

WHILE STUDENT GROUP HEALTH INSURANCE is still to some degree in the experimental stage, definite basic principles have been established. An examination of these principles will be of assistance in deciding whether such a plan has a place in your student health program.

Students need some type of medical expense protection while in college. The 16 to 24 year old age group has a higher accident ratio than has any other age group. This is not surprising. Included in this statistic are many athletic accidents. Yet it includes automobile accidents, rough-housing, falls on stairs, and similar occurrences, and these make up a far greater total than do accidents resulting from athletics. Sickneses constitute a much greater problem than accidents do from the standpoint of dollars and cents spent for medical care. Student insurance claim files disclose approximately three sicknesses to every one accident. Furthermore, according to the U. S. Department of Health, Education and Welfare, 66 of every thousand college students can be expected to have surgical treatment each year. Approximately 10 of these will be appendectomies, the cost of which often runs as high as \$350. This age group also has a high incidence of upper respiratory disease, which also can cause considerable expense. The average college student and his parents are not in a position to afford costly medical bills.

Most family hospitalization and medical care plans provide that a child is no longer a dependent when he has reached the age of 18 (a few plans do extend the benefits to the age of 19). By the time a college student reaches his sophomore year, the family protection no longer includes him, and he is sent searching for other means.

The student and his parents look naturally to the college for assistance in providing medical care and expense protection, much the same as employees look to their employer to provide the means for care and sound financial protection. Without the school's assistance, the student is faced with two alternatives, neither of which is totally satisfactory from his or his parents' point of view. The first is to purchase an individual insurance policy, the cost of which may be as much as \$50 a year. The second alternative is for the student to proceed with no expense protection at all, relying on luck.

#### **PUBLIC RELATIONS VALUE**

Most colleges have recognized their students' plight and have acted to bring about at least a partial solution. While some are fulfilling what they feel to be their responsibility, other colleges have acted for no other apparent reason than a desire to be of service to their students—the public relations value of which is apparent.

Granted that most schools have been willing to take the initiative in provid-

ing for medical care and expense protection, the question arises as to whether this care is extensive enough. In most cases, it is not. Most colleges and universities have concentrated heavily on preventive care rather than on the treatment of serious accidents and illnesses. They have partial medical service, which includes an original medical examination and some form of tuberculosis screening, together with clinical and infirmary care for minor illnesses and injuries.

While it is true that serious accidents and illnesses occur to fewer students than the number who benefit from the preventive program, it is also true that the expense resulting from the more serious type of disability presents a greater problem to the student. It would appear that adequate provision for hospitalization and for surgical and other medical treatment is easily as important to the successful completion of the student's education as the yearbook, the student newspaper, and other items which are considered to be an integral part of college life and for which the student is automatically billed at the beginning of the year.

Once a school is in agreement that its student health program should go beyond the preventive and clinical stage, it then becomes a question of how best to arrange or provide for the treatment and expense in connection with the more serious disability.



By the time a student reaches his sophomore year, the family insurance no longer includes him.

Three ways have been most commonly thought of.

The first is for the school to build and maintain its own facilities. This means the erection or conversion of a building into a hospital and equipping and staffing it in such a way as to receive proper accreditation. Such a hospital is often found in conjunction with a medical college, but there is also a limited number of cases, such as at Cornell University, where these facilities have no connection with the medical school but are maintained exclusively as part of the student health program.

The second method is for the college to underwrite itself or "self-insure" a plan of benefits. Sometimes such a self-underwritten program will be coupled with a working arrangement with one or more local hospital and doctors' clinics, although the benefits may not be restricted to them and may, as in the case of commercial plans, be payable anywhere.

While the adoption of either of these two methods may more or less solve the basic problem, there are certain definite advantages to a student group health insurance plan. With such a plan there is no need for a large initial financial outlay to erect facilities, or for maintaining and paying for a medical staff large enough to run a hospital 12 months a year. Also a student group health insurance

plan provides for the student away from school as well as when he is in the vicinity of the health service facilities. There is no financial risk to the school involved when this plan is installed, as there would be if the school underwrote its own insurance plan. Therefore no reserve for losses above the expected need be set aside.

There is some question as to whether the institution may legally underwrite its own student insurance program with benefits payable anywhere. The Louisiana legislature prohibited a state school from continuing such an insurance program, contending that the school's business was education and not the taking of such financial risks as insurance involved.

What is student group health insurance? It is a plan that has been arranged for by the school for all the students. All who participate have the same benefits, rates, exclusions and other policy features. Students enrolling need not pass a physical examination or even be in good health at the time. The only qualification is that they be students of the school.

Student group insurance is available only through the school's endorsement and willingness to accept a master insurance policy. Only students may enroll in the plan, although occasionally the staff and faculty may be included. Student insurance is tailor-made, so that it automatically becomes an in-

tegral part of the student health service by supplementing already existing facilities.

The primary purpose of a student plan is to protect against major medical expenses. The premium dollar, therefore, usually is concentrated upon providing liberal benefits for the more seriously afflicted while the student who needs no more than a prescription filled continues to take care of the expense out of his own pocket. It is not the intent of a student insurance plan to pay for every dollar of medical cost. Nor is it the purpose of a plan to include a provision for the college preventive program. The school can take care of the expense of a preventive program more easily and cheaply than if it were insured, and since there is mutually no financial risk involved in a preventive program, insurance would be out of place.

Student insurance plans offer protection 24 hours a day, wherever the student may be or whatever he may be doing. The plans are available on either a nine months' or 12 months' basis. The premium increase, incidentally, to go from a nine months' to a 12 months' plan is a directly proportionate one, in spite of the fact that the student may engage in hazardous work during the summertime. Plans provide reimbursement of the cost of medical care arising out of illness or accident (most plans include

provision for both) up to a varying amount, mostly \$500 for any one case.

Student insurance benefits are payable irrespective of any other benefits for which the student might be eligible by virtue of other coverage. Therefore, there is no problem arising from a student coming to college already covered by medical insurance. The benefits in such a plan most often include payment for hospital room and board, hospital miscellaneous expense, and surgeon's and medical costs while the student is confined to a hospital. Also included in many plans is provision for x-ray and laboratory examinations, private nursing, special medicines, surgical appliances, ambulance service, and other services not included in the institution's health program.

Benefits may be payable on one of two bases, either unallocated or allocated. "Unallocated" means that there are no restrictions, within the limit of the plan itself, as to how much may be paid for any one phase of treatment. In an unallocated plan it is immaterial whether a student enters a hospital room costing \$20 or \$5 per day. It is immaterial whether a surgeon charges him \$50 or \$25 for the removal of his tonsils. In either case, the full amount of the charge is paid until the limit of the plan (usually \$500) has been reached.

In contrast, an "allocated" plan provides a fixed schedule, usually based on local costs, and a limit for each benefit of the plan that may not be exceeded. For example, \$10 per day for as many as 30 days might be allowed for hospital room and board. A student entering a room that costs \$12.50 per day would do so with the knowledge that the \$.25 difference would be paid from his own pocket.

Obviously, an unallocated plan is more expensive than is an allocated plan. However, it often is difficult to foresee large medical bills that a student may incur and therefore make provision for them in an allocated plan. Such expenses usually result from accidents where, for example, a severe fracture must be set in a doctor's office. Such treatment might not be provided for in an allocated plan unless the student is hospitalized. Unfortunately, however, the treatment may well result in considerable expense to the student.

It is to provide for this type of circumstance that the majority of schools inaugurating plans at the present time are combining an unallocated accident feature with allocated benefits, mainly

hospitalization and surgery, for illnesses. The cost is low (this is not the case when the sickness benefit is also unallocated), while at the same time the protection is excellent. Under this plan any and all accident bills, whether they require hospitalization or not, are covered, while more than adequate provision is made for the care of serious sickness.

Exclusions under the usual plan are: war, preventive treatment, pregnancy, childbirth, miscarriage, and dental treatment, except that resulting from injury to natural teeth. Medical treatment provided without additional charge by the health service, as well as treatment rendered by doctors or hospitals not approved by the health service, is not covered. The reason for the last provision is the fact that insurance companies do not wish student insurance plans to aid a student who wishes to circumvent the existing college health service.

#### PREMIUM RATES

As to premium rates, the average plan costs between \$5 and \$10 a semester, less than a Saturday night date. It is impossible to give a precise rate for a school until an accurate survey is completed and a formal presentation of a plan is made. Many factors affect the rate at each school: (1) benefits desired; (2) present health facilities; (3) proportion of males to females (boys are much more prone to accidents, and girls have a higher sickness incidence rate); (4) varsity and intramural athletic exposure, if it is to be covered, and (5) manner of student participation, compulsory or voluntary.

Often it will be found that the benefits first desired by a college are not exactly what is needed. An examination of the claim dollars paid during the first year may, for example, show that one benefit was hardly used at all, while the limit provided for another benefit was not as high as it should be. It is not unusual, therefore, to discover a good deal of adjusting of benefits during the first few years a plan is in effect.

A new plan in which student participation is compulsory is by far easier to administer. The insurance company does not require the names of the students and there is no need for any record keeping of those enrolled. A student who becomes sick or injured is automatically known to have the benefits of the plan available to him, and

no record checking to determine this fact need be done.

Voluntary participation plans are available and, in most states, can be offered without the necessity for a set percentage of the students to enroll. The success of the plan, however, does depend upon a large enough participation to minimize the effect of the sickly group who are always most certain to be the first enrolled.

The cost of a voluntary plan usually runs between 10 and 50 per cent higher, depending upon the circumstances.

A third method is a combination of the full and voluntary participation ideas. This method assumes that each student will wish the coverage but nevertheless gives him the opportunity to decline its purchase. In some cases, the student is covered by other insurance and has no necessity for coverage under the student plan. Only those not wishing to participate sign a card, indicating that they have been given the opportunity to enroll but do not wish to do so. Such a card in the school files helps alleviate any misunderstanding that may arise at a later date.

Here's a word about claim handling and paper work at the health service. While there is almost always a local representative of the insurance company to handle unusual problems that might arise, there is a limited amount of paper handling to be done by the school, and this is most satisfactorily handled at the health service. Claim forms must be distributed and checked for accuracy when they are returned, and sometimes they must be signed or initialed by the physician in charge. While I would not attempt to minimize this work, it cannot be called considerable.

The percentage of schools with student insurance plans is still relatively small, perhaps no higher than 20 or 25 per cent. The reason for this does not lie in the lack of value of the plan itself. Rather the reasons would appear to be twofold: (1) the newness of the insurance and the failure of the insurance industry to merchandise it properly, and (2) the hesitancy of college administrators in accepting the idea of providing truly complete health programs and financial protection for students.

To me the important thing is that some type of expense protection is needed by students and that the college and its administrators are the only ones in a position to be of real assistance.

# ***The Budget Doesn't Belong to the Business Manager***

**Rather, it's the instrument of the president**

**HARDING B. YOUNG**

*Assistant to the President, Agricultural, Mechanical and Normal College, Pine Bluff, Ark.*

MANY BUDGET PROBLEMS IN SMALL colleges stem from the lack of a clear understanding of what is meant by a budget. To me budgeting means the entire program of the college expressed in financial terms. On the basis of my doctoral research at the Harvard School of Business Administration, I feel that the college budget can be made a useful management tool for program direction as well as for control.

In college administration there are both financial and educational decisions. The two must be coordinated. The budget, as the whole program of the college in financial terms, becomes the device for proper coordination. It is the plan that predetermines the course of action of the college in such detail that every responsible unit of the college may be guided thereby.

The task of coordinating financial and educational decisions follows the making of basic educational and financial decisions. Basic educational decisions include those relative to (1) type of finished product to be turned out as graduates, (2) essentials in terms of course offerings, faculty, buildings and facilities to do the job, (3) basic decisions as to whether the college will be growth-minded or quality-minded.

Having made the foregoing educational decisions, the college administration must make the following financial decisions. First, what will be the cost in dollars and cents, under best possible conditions? Second, what financial sources are available to support the educational program desired? Third, is there adequate support for the program, and if there is not, how can the program be pared down?

In some of the small colleges I have studied, these decisions are usually made by the president and the business manager. The business manager of a small college should be an educator and should be on the educational policies committee, and the dean and department heads should be clearly informed of the financial ability of the college to meet educational objectives. While it may be desirable first to consider educational programs apart from financial considerations there comes a point when financial aspects must be taken into account.

Many a control mechanism has failed because of the way it was introduced. A specific example is cited on the opposite page.

## **Case 1**

Here the college was faced with a problem requiring immediate action. The college was operating at a deficit. Some department heads and faculty members had abused the purchasing privileges. Control devices were needed not only to eliminate abuses of the system but for over-all financial planning and control. The big question was: How could this system have been introduced with the minimum of friction and misunderstanding?

The business manager assumed that he and he alone had the answer to the problem. He further assumed that he had the authority to effect his solution because of the action of the board of trustees in employing him and his one conference on the subject with the president. He assumed that his authority was sufficient to accomplish his objective without his going to department heads and divisional direc-

tors, notwithstanding the fact that most of them had been with the college for a number of years. Even though the business manager did not find time to, or see fit to, talk the matter over with those affected, he was sure that, through his letter, they would "realize the importance of this notice and the attempt on the part of the college to control expenses." Here he was appealing to the intellect rather than to the feelings of those involved. In his scale of values, details of a control mechanism were placed above human feelings.

Failure of the business manager is apparent. He has not been able to accomplish his goal in a period of eight years. He seems unaware of the true meaning of authority—"the ability to get things done." He sees the president and himself as the authorities, when in fact authority comes from below; it is implicit in cooperation. He was content to issue orders, which seem to stifle rather than enlist cooperation; nor was he aware of what it means to his own position and security not to have his orders obeyed.

The department heads and division heads resented the action of the business manager because they were accused of making unauthorized purchases, which implied that they all were personal and not in the best interest of the school, and because they perceived the action of the business manager as a threat to their authority and security. Consequently, they did not understand as the business manager was sure they would.

It should be noted here that the threat in the case of the dietitian served to eliminate one particular kind

(Text Continued on Page 48)

## CASE STUDIES OF TWO BUSINESS MANAGERS' OVERZEALOUS APPROACH TO BUDGET CONTROL

**Case 1.** Following a series of deficits, expansion of plant and facilities, increased enrollment, and general growing complexity of operations, the trustees of Alpha College, upon the recommendation of the president, hired a new business manager.

One of the new business manager's first control measures, approved by the president, was to centralize purchasing. Prior to hiring the business manager, all purchasing had been performed by the president, *i.e.* he signed all purchase orders. Actually, requisitions were approved by the president and/or the accountant and forwarded to the divisional directors and department heads who did the purchasing; or, alternatively the divisional directors or department heads purchased supplies and equipment, obtained invoices marked paid, and were reimbursed from a petty cash fund.

The new business manager immediately sent out a letter to all staff members informing them of new purchasing regulations. Simultaneously, he sent a letter to all regular creditors informing them of the new procedure and warning them that

merchandise sold to faculty members without an official purchase order would not become an obligation of the college but would be the personal responsibility of the faculty member.

The business manager was surprised at the unfavorable reactions to the new procedure. Because of long established relationships, some companies continued to honor requests of certain faculty members and to bill the college. When the business manager failed to honor the invoices, the suppliers contacted the president, who questioned the business manager's judgment in the situation because of his public relations.

One department head became so angry, when informed that a certain purchase had become his personal obligation, that he left the office and returned with his gun in pursuit of the business manager. Fortunately, the business manager found safety in the college vault.

The dietitian, who had been responsible for all food purchases, objected violently to the new procedure and, when pressured to comply, refused to serve adequate food or sometimes allowed food to run out

before all students had been served, blaming the new purchasing regulation.

The business manager was stubborn and continued to dishonor unauthorized invoices. After eight years, he still has three or more such cases a month.

Following is a copy of the letter sent by the business manager calling the attention of staff members to the purchasing procedure.

To: All staff members  
From: The business manager  
Subject: Purchasing

In order to stop the large number of unauthorized purchases, all purchases in the future will be made by the business office. Where staff members are allowed to make purchases, they must first get a purchase order signed by the business manager. The college will not be responsible for purchases which do not follow this procedure.

I am sure you realize the importance of this notice and the attempt on the part of the college to control expenses. I am confident we can count on your wholehearted cooperation.

Signed: \_\_\_\_\_ (Bus. Mgr.)



**Case 2.** At Lambda State College the president computed what the payroll would be for the year and turned this figure over to the business manager, who deducted it from the anticipated revenue from all sources. After this he deducted such fixed charges as insurance, bond payments, matched fund requirements (teacher retirement and social security), and utilities and set up a stipulated amount for general printing and minimum for maintenance, including automotive maintenance. The remainder was allocated to departments based on the business manager's knowledge of departmental needs as conveyed by department heads in written requests.

The business manager stated that he could not depend on faculty and department heads to assist with the development of departmental allocations because of jealousy, balloon budgets, and probable unsound financial decisions. Further he stated

that such a democratic procedure would be too time consuming. Department heads over a period of years learned that budgets would be reduced and had resorted to inflating their requests.

When the budgets were completed and approved by the president and the board of trustees, a copy of the departmental budget was sent to each department head stating that this was the approved budget for the fiscal year.

Typical of the attitudes of department heads and divisional directors are these two.

"Some divisions or departments receiving 'adequate' budgets have resorted to inflating their budget requests in order to get approximately what is wanted or needed when the budget is cut and returned to them. Our needs are urgent and so conspicuous that I have been tempted to do the same thing. However, each time I have decided against this tech-

nic, first, because of conscience and, then, because our over-all request has been small in comparison with other requests and there appeared to be no reason to reduce our budget further."

A departmental chairman declared: "When budgets are sent in they are arbitrarily cut by the business manager before they go to the president. I think before a budget is cut the person in charge should be consulted. You don't have a chance to point out what you consider most important and why. This year we sent in our budget and later received a statement showing the amount allotted for each item requested. We do not have permission to shift allocations. For example, if I don't want to travel but use the money for equipment, I cannot make that decision. Aside from that, even if I get an appropriation I might not be able to expend it. Whoever gets there first gets his request granted."

of undesirable behavior, the short-circuiting of purchasing regulations. But an equally undesirable kind of behavior, from the business manager's point of view—failure to serve adequate food or allowing food to run out and blaming the purchasing regulation—was substituted for it. This often happens when the "authority" does not or is not able to control alternative behavior.

How could the business manager have accomplished his objective? His chances for success would have been far greater had he become acquainted with the department heads, talked over problems, and assured them that he was acting in the best interests of their departments. Letters are cold and impersonal. Their interpretation depends on the mood of the reader. The business manager failed to consider the total situation; he considered only the minor part—the details of the control mechanism.

Similar problems have arisen out of methods of preparing the budget.

## Case 2

With regard to faculty participation in the budgetary procedure, it is felt that it should be limited to the initial stages of estimating needs and making recommendations to department heads. According to one administrator, to allow faculty participation in budgetary decisions would lead to costs far in excess of gains to be attained. Faculty members would have to be apprised of the financial problems of the institution, which would be time consuming. Furthermore, sound budgetary judgments would be difficult for them because their special interests would not contribute to an over-all point of view. It would be difficult to reconcile divergent theories and convictions held by the different faculty members. The cost of this method would be the cost of time lost from regular teaching and research duties.

Case 2 suggests a number of significant questions. The main question is: Who should participate in the budgetary procedure, and at what stages? This main question has several corollary ones: (1) What are the objections to department head and faculty participation in the budget making process? (2) What, if anything, can be gained from such participation? (3) What are the probable effects of nonparticipation?

The business manager's objections to departmental head and faculty par-

ticipation were: (1) the practice of balloon budgets, (2) jealousy of department heads, (3) the time and trouble involved, and (4) possibility of unsound decisions.

*Balloon Budgets.* Department heads try to get the minimum funds necessary to do an acceptable job. There is always competition between departments because they are being judged by departmental offerings, staff and the like. Having no alternative, they think department heads resort to the practice of balloon budgets. Believing that department budgets are inflated, the business manager cuts all of them without checking on need, thereby discouraging those who would cooperate by turning in only minimum requirements and tempting them to change to their colleagues' balloon budget techniques. It would be better to encourage the department heads to budget actual needs, as they see them, by priority and to give the department head the opportunity to decide what he can best afford to give up.

*Jealousy of Department Heads.* Department heads find it difficult to maintain a broad point of view. The more highly specialized the department is the more difficult it will be for the department head to see the total picture, and this should be expected. Part of the job of the dean of instruction, business manager and the president should be to consider these aspects of the situation.

*Too Much Time and Trouble.* The democratic process is slow. The costs involved include time spent in process or time diverted from other duties. This cost should be matched against the gain. If faculty-wide participation is too unwieldy, perhaps some representing group could be selected.

## EXAMINE NONPARTICIPATION CASE

Perhaps the best way to appraise participation is to examine a case of nonparticipation (Case 2). The reaction of department heads at Lambda State College illustrates the types of misunderstanding that can occur in the budgetary process—lack of understanding on the part of the business manager of the problems of department heads and divisional directors and their staffs; lack of understanding on the part of the faculty, department heads, and divisional directors of problems of the business manager and the president. As a result of nonparticipation, department heads are suspicious

of the business manager's motives. They want to participate and resent being left out.

The failure of the business manager to give department heads the right of appeal when their budgets are cut means that he is asking them to assume the responsibility for a standard they did not help to set. This puts them in the fortunate position of being able to argue the validity of the standard. The business manager is left without a defense.

Participation by department heads and divisional directors would provide an opportunity for the business manager to become more familiar with the educational program and, at the same time, would provide an occasion for him to explain the financial problems of the institution. Perhaps friction and mistrust would be reduced as the department heads would learn the recommendation of the president in advance of board action. Aside from the possible improvement of faculty morale, there is less likelihood that the business manager and president will make arbitrary decisions.

## WHERE RESPONSIBILITY RESTS

The weight of evidence shows that responsibility for preparation of estimates should rest with those individuals responsible for performance. Any adjustments to the original standard set by the department heads should be determined and accepted by them and the necessity for any adjustment should be fully explained.

While total faculty participation is costly and while it would be extremely difficult to reconcile widely divergent points of view, the value of faculty participation should not be minimized. It can be obtained from faculty participation in framing departmental requests which are submitted to the dean of instruction and subsequently to the business office and the president. Evidence seems to show that it is necessary for smooth functioning of the budgetary process that department heads have the right of appeal.

*Faculty May Make Unsound Decisions.* There is always the possibility that faculty members and department heads will make mistakes. But there is no guarantee that the president and the business manager will not make equally damaging ones. The cumulative results of the efforts of all individuals comprising an organization determine its success.

(To Be Concluded Next Month)

IN RESPONSE TO A PETITION OF Dutch settlers, George III of Great Britain granted a royal charter in 1766 to the "Trustees of Queen's College in New Jersey." One of the provisions of the charter was that the president of the college should be a member of the Dutch Reformed Church. After the American Revolution the royal charter of the college was amended and confirmed by the state of New Jersey in 1781 upon the petition of its board of trustees. In 1825 the board voted to change the name of the corporation to the "Trustees of Rutgers College in New Jersey" in recognition of the generous gifts of Col. Henry Rutgers.

When federal funds became available for the support of instruction and research in agriculture under the provisions of the Morrill Act of 1862,<sup>1</sup> the trustees of Rutgers requested the New Jersey legislature to designate their scientific school as the "New Jersey Land Grant College." As such, it was made subject to the supervision and control of a board of visitors created for the purpose and appointed by the governor of the state. In 1917 the legislature changed the name of the land-grant college to the State University of New Jersey.

In 1920 the trustees of Rutgers deleted from its charter all religious and sectarian qualifications and, in 1927, increased the number of its ex-officio trustees to include five state officials for the purpose of promoting "a closer cooperation in educational work between this institution and other educational agencies of the state of New Jersey." The legislature, in 1928, appointed a special commission to investigate and report on the most effective procedures to be followed in coordinating the educational work of the state with that of Rutgers College.

By 1945 Rutgers was recognized by the state and by its own board of trustees as the state university, *i.e.* as an instrumentality of the state of New Jersey. All of its divisions became subject to a public trust for higher education under the supervision of the state board of education.

A much more drastic revision of its charter was proposed in an act of the legislature in 1956. The name of the institution would become "Rutgers, the State University." The act created a board of governors to take over the duties of its board of trustees in the

<sup>1</sup>12 Stat. 503 (1862).

## Rutgers Becomes a State University

T. E. BLACKWELL

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general supervision and conduct of the university. However, the identity and name of the old corporation, *i.e.* "Trustees of Rutgers College in New Jersey," would be preserved intact, and the trustees would retain custody and control of its endowments and other assets. The trustees were given until Sept. 1, 1956, to accept or reject the provisions of the act.

The trustees, doubtful of their power, as charitable trustees, to consent to this reduction of their authority and responsibilities, requested a declaratory judgment of the chancery division of the supreme court of New Jersey as to the constitutionality of the act of reorganization. They also requested a bill of instructions from the court.

Justice Schettino delivered the opinion of the court.<sup>2</sup> He reviewed the history of Rutgers and the urgent need for increased public financial support in order to meet the growing demand for higher education. He emphasized the point that the court was not called upon to determine the wisdom of the plan but merely to pass upon its legal validity. The following are excerpts from his opinion:

"The first inquiry is directed to determining the nature of the charitable trust held and administered by the trustees of Rutgers College in New Jersey. It is created by charter and must pursue the charitable purposes outlined in its charter and amendments thereto.

"The board of trustees retains power

<sup>2</sup>Trustees of Rutgers College in New Jersey v. Richman, 125 A 2d. 10 (1956).

to withdraw and withhold the use and income of the trust property, presently of the value of \$89,000,000, from the board of governors in the event that its trust duties for the accomplishment of the trust purposes are not adequately discharged.

"The board of governors, to whom substantial managerial powers would be delegated, is controlled through a majority representation by persons designated by the governor of the state of New Jersey, with the advice and consent of the senate.

"Thus, we find here created a hybrid institution—at one and the same time private and public, with the state being granted a major voice in management and the designation, 'State University,' and the institution being granted private autonomy and control of physical property and assets."

Justice Schettino then proceeds to a consideration of the federal constitutional question of the power of a state legislature to modify or impair the provisions of a corporate charter.

Many of the early charters granted by the crown or by special act of the legislature were without express reservation of power to alter, amend or repeal. Such a charter has been held to be an inviolable contract between the state and the corporation. This is the doctrine of the famous Dartmouth College case.<sup>3</sup> The opinion of the current case cited an article by Prof. Austin W. Scott<sup>4</sup> as authority for the concept

<sup>3</sup>Trustees of Dartmouth College v. Woodward, 4 L. Ed. 629 (1819).

<sup>4</sup>Scott, Austin W.: Education and the Dead Hand, 34 Harvard L. Review 1 (1920).

that progress demands changes. If the proposed changes are reasonable, the legislature, with the consent and approval of the corporate board, should have the power to make them. The opinion of the court continues:

"I conclude that the court has jurisdiction to grant a final judgment . . . and that the board of trustees of Rutgers College in New Jersey has power and authority to adopt chapter 61 of the Laws of 1956 as a valid and constitutional act."

In the early days of this country the distinction between the privately supported and controlled college and

the tax supported, publicly controlled institution was not as sharp and clear as it is today. One reason for this is the fact that, before Congress passed the first land-grant act in 1862, there was no general agreement for the proposition that the financial support of higher education is an appropriate function of government. Many of the state universities on the Atlantic seaboard were founded not by the legislature but by individuals or groups of individuals. For example, what is now the University of Connecticut was established in 1881 as the Storrs Agricultural School by Charles and Au-

gustus Storrs. It became the Connecticut Agricultural College in 1899, and the state university in 1939.

The University of Delaware was founded in 1749 by the Presbyterian synod of Philadelphia and received a charter from two members of the famous Penn family in 1769. It became a land-grant college in 1870 and the state university in 1921. The University of Pennsylvania, despite the implications of its name, is an endowed, privately controlled institution. It was chartered in 1755 as the College and Academy of Philadelphia. The present name was adopted in 1791.

## A Safe Place to Work and Study

FREDERICK B. WILCOX

Supervisor of Operations, University of Wisconsin, Madison

THERE IS NO DEPARTMENT OF SAFETY, director of safety, safety employe, or budget or fund earmarked for safety at the University of Wisconsin. Instead, there is an *organization for safety* that utilizes the talent and ability of a large number of people. The hub of this organization is the authority and responsibility of the superintendent of buildings and grounds, and the staff is made up of those who are advantageously placed by reason of their regular work. Coordination of activity is delegated to the supervisor of operations.

The university has all the backing of law and regulation essential to a complete safety program. By statute, building and safety codes developed and administered by the Wisconsin Industrial Commission are applicable to all state institutions as well as to business and industry. That would seem to leave no job for a university safety organization, but the commission does not have power of enforcement over another state department, nor is it

easy to apply industrial codes to the teaching and research program.

It has been our policy to adhere to all codes as long as they can be applied. When an impractical or impossible situation arises, we seek expert advice and develop a policy in the best interests of safety. At times it is necessary to request a formal waiver of a specific code.

The state carries its own insurance for injuries to employes and for loss of property from fire. All university employes — administrative, the teaching staff, civil service, and paid student help — are insured under the Workmen's Compensation Act. Claims for medical costs and disability are paid out of the State Insurance Fund. Losses in buildings, equipment and supplies, because of fire or smoke incidental to fire, are paid out of the same fund.

If penalties are assessed because of failure to comply with state codes, these, too, are paid from the fund. For instance, an employe injured on an unprotected machine might be entitled to 15 per cent additional compensation. Such penalty is assessed by

the industrial commission and the State Insurance Fund pays the bill. In no case is the university or any person connected with it penalized for neglect or willful violation of a code unless that penalty was an internal disciplinary action. Of course, none of this precludes the possibility of civil action brought through the courts, and state employes are not covered by a blanket personal liability insurance.

A department of preventive medicine and student health, a branch of University Hospitals, furnishes free medical service to undergraduate and graduate students. This department also offers a first-aid treatment service to any university employe who is injured on the job, although that service is secondary to demands of student health. If, in first-aid treatment of injuries, something more than minor costs are involved, those costs are made a part of the claim against the State Insurance Fund.

That gives you the framework of governing laws and insurance coverage. By law, the university is just another industrial plant, mercantile establishment, theater or hotel with one dif-

From a paper presented at the National Association of Physical Plant Administrators, Madison, Wis., 1956.

ference: Compliance with law and enforcement of compliance are left to the institution. In industry, reduction of accidents literally pays its way in insurance premium refunds, and penalties can force compliance with regulation. Although rates of premiums paid into the State Insurance Fund by the university can be increased by reason of unsafe conditions, the dollar sign as a policing agent is inconsequential and the institution must police itself.

It has been difficult to obtain and maintain the kind of record that will show at a glance whether there is

damage to buildings or equipment. Since the facts of fire may point the way to more than ordinary carelessness, janitors and night watchmen have been ordered to inform their supervisors of fire, no matter how small. For the remainder of this record, we depend on calls for fire fighting equipment and insurance claims for damage to equipment and supplies.

For many years it was the assistant superintendent's job to make a housekeeping survey of conditions in every university building. When the volume of buildings reached 70 million cubic feet, the job overwhelmed the man

department of buildings and grounds report code violations and whatever else appears to them to be unsafe. Regularly we call on experts from the industrial commission, Madison Fire Department, and any other sources of technical advice for help. Usually this sort of inspection is of a specific problem or device.

Elevators are inspected and tested twice each year by a representative of the industrial commission cooperating with two men from our own department. Sprinkler systems are inspected and tested twice each year by men from the Fire Insurance Rating Bureau in cooperation with our plumbers and steamfitters. When someone from the industrial commission investigates an accident, he is accompanied by the supervisor of operations and in that way we learn firsthand how to spot deficiencies. Within the department of buildings and grounds, each shop has its "must" list of regular inspection.

Emergency lighting equipment for the hospital is tested twice a month, and emergency devices such as portable compressors, power supply and pumps are tested once each month. Internal fire alarm systems are checked once each month. Fire extinguishers are weighed or refilled once a year, and actuating devices for automatic fire extinguishing systems also are tested once each year. Cannisters on gas masks are replaced each year, whether they have been used or not.

All efforts to make progress in safety are wasted if nonconforming equipment is continually purchased. It is the responsibility of the employer to see that machines are properly guarded and to require use of those guards. If there is no control over purchasing, acquisition on a competitive price basis can soon fill the institution with cheap, unsafe equipment.

The superintendent's directive to all shop personnel states that under no circumstances are employees of a department to become party to code violation by initiating or perpetuating unsafe installations. Any requisition for purchase of an item that might involve special hazard is held up pending clearance from the supervisor of operations or his representative. This sounds like a large order, but it usually requires only a telephone call for each item questioned. After three years of this procedure, many items are referred for clearance on safety before a requisitioning for purchase is made. The idea is growing that sound advice

**The University of Wisconsin has developed  
a set of practices to protect students and  
staff against fire, gases and other hazards.**

need for concentration of effort in some specific field of safety. Pending better ways for determining losses through injury, we have made use of whatever records could be easily compiled without additions to staff; one of these is a tabulation of preliminary accident reports. University personnel is urged to report even minor accidents on a standard injury report form. This is the information available at the time of the accident or shortly thereafter, and it forms the basis for future claims for workmen's compensation or employer liability.

Ordinarily three copies of this report were forwarded to the university personnel office. It was an easy matter to require four copies, with the fourth going to the superintendent of buildings and grounds. Once each year these reports are compiled to show type of accident and location by departments. For most purposes, we found that 11 categories for type were sufficient.

Records of fire are somewhat more difficult to obtain. We recognize the fact that there are hundreds of unreported small fires which did no

and an alternative had to be found. This survey required approximately two months to accomplish, and the logical persons to do the work were two supervisors of daytime janitors. They are the men who at some time during the year should see every area of every building within their operation, and whose supervisory job is least affected by time required for such a survey. To make this tedious work as simple as possible, a code number was determined for each of 10 conditions related to housekeeping. The information we get is name of the building, date of inspection, room numbers, and code numbers to indicate conditions. It gives us a reasonable word picture for each area and eliminates volumes of notes and explanation, although it is short on adjectives; we must interpret whether the condition is good, bad, very bad or awful.

Without help assigned to the safety job, the greatest problem has been inspection. Except for the housekeeping survey, inspection is handled when slack work periods exist and the job is spread among a number of people. Shop supervisors and janitors with the

can be had for the asking and that skills and experience of buildings and grounds personnel can be utilized for something besides pounding and plastering.

Similarly, the matter of overloading and overcrowding is minimized by co-ordination among departments. Printed forms have been prepared so that assignment of physical plant facilities for public functions and special events must be cleared with the superintendent of buildings and grounds before approval is complete. We can determine limits on room capacity and restrict use of facilities, or, if necessary, refuse use of a building for the event. Unfortunately, this regulation applies only to outside and student organizations' use of classroom and laboratory buildings.

#### FIRE IS WORST ENEMY

Fire is, without a doubt, our worst enemy. Fire loss is very low at Wisconsin and that may be due in part to some things we believe and do. For instance, we believe in prevalence of first-aid fire extinguishers in all buildings. Not only are all buildings equipped with an ample supply of Class A fire extinguishers, but the attempt is made to install extra extinguishers of the correct type in every area of special hazard. Our inventory now exceeds 2100 extinguishers, including 560 of the carbon dioxide type. On an average, 40 carbon dioxide units are recharged every year, and each unit recharged can be classified as one potentially serious chemical or electrical fire extinguished.

An example of what is considered reasonably thorough protection is the chemistry building, where 54 carbon dioxide extinguishers, ranging in size from 5 pounds to 50 pounds, supplement an automatic water sprinkler system, a specially protected solvent storage vault, and a normal supply of soda-acid and foam extinguishers.

Wherever large supplies of volatile solvents are essential to teaching and research programs, special solvent storage vaults have been constructed adjacent to those buildings. There are now 11 such vaults. They offer advantages of easy access to supplies, which frees shelves in laboratories; make possible quantity purchases with consequent cost savings, and reduce handling to a minimum because suppliers deliver directly to the vaults. Solvent storage facilities are incorporated in plans of all new laboratory buildings.

Paper towels have been replaced with cloth at Wisconsin. Although the initial cost of cloth may exceed that of paper, related savings more than offset this difference. Prior to installation of cloth towels, we could expect three fires in waste towel containers every week. Fortunately, none of these fires caused real damage, but there was always the chance one would not be discovered in time. Installation of cloth towels eliminated that hazard.

Prevalence of flame photometers and other devices using bottled gas led to a directive to suppliers of the fuel. That directive informs the supplier that connecting to a nonconforming installation will result in cancellation of his contract. There was immediate improvement in the situation but not complete correction because in many cases cylinders were delivered to a building to be connected by someone else. When inspection reveals a nonconforming installation, the code requiring an outside station for these cylinders is modified to permit suspending them outside of a laboratory window as a temporary measure until a permanent installation can be arranged.

When fire strikes, the city of Madison supplies men and equipment at no cost to the university. If the fire is outside the city limits, the town of Madison takes over. Firemen and fire marshals make a special effort to understand the problems at the university and to familiarize themselves with conditions.

#### SMOKING PROHIBITED

Those are the major contributions to protection from fire. Except for burned mattresses and upholstery, the record fails to reveal more than one damaging fire caused by careless smoking habits. Regent regulations prohibit smoking in classroom and laboratory buildings except as approved by the superintendent of buildings and grounds.

We have tried to take a realistic attitude and provide certain areas for smoking in every building if a reasonably safe area is available. Smoking is permitted in offices and in lounges designed for the purpose. The privilege is extended to seminar rooms and portions of public space if floors are fire resistant and if ash containers are supplied.

Here are more policies and practices successful to some extent in reducing accidents.

1. Transformers are being moved from below ground vaults to above ground locations as rapidly as funds permit.

2. All requests for purchase of radioactive isotopes are carefully analyzed by the responsible faculty committee, which determines qualifications of the user, availability of proper handling and storage facilities, extent of the project, and method of disposal. The committee's determination is final.

3. Rubbish from buildings housing chemical laboratories is collected separately. Hot loads are anticipated, and the refuse is dumped on university property rather than being hauled to city dumping grounds.

4. Use of germicidal lamps to replace alcohol spray in culture rooms and transfer booths is recommended. There is no indication that the lamps are unsatisfactory.

5. Use of ethane as a refrigerant has been prohibited.

6. Fume hoods must discharge into proper ducts extending above the roof. Discharge of vapors, gases and particles that are dangerous or offensive cannot be made through windows.

7. Gas control valves on incinerators are placed outside of the possible area of heat and smoke. A device for limiting burning time has been installed on a number of incinerators. This device is a two-hour limit spring wind timer, very simple and not expensive.

8. Eye protectors and respirators are supplied to any employee of the department of buildings and grounds who is engaged in work that might result in eye injury or in breathing harmful dust. This is in addition to protection for grinding, spray painting or sandblasting and includes such work as shrubbery trimming and leaf mulching. A more than ordinary precaution is taken by the department of chemistry where eye protectors are issued by stockroom clerks to students engaged in laboratory experiments where there is any danger to eyes. The department has purchased as many as 1800 units at one time. Employee and student acceptance of the need for wearing eye protectors has been accomplished by replacing heavy uncomfortable goggles with lightweight plastic covers that fit comfortably over regular glasses.

Those are just a few of the practices followed at the University of Wisconsin to make it a safer place to work and study.

# ***Building a Food Service Budget***

**T. M. REHDER**

*Director of Dormitories and Dining Services  
State University of Iowa, Iowa City*

AT TIMES I HAVE THOUGHT THAT MY food service budgets were built on quicksand—they had so many variables and changed so rapidly. Fred Ambrose, former business manager at Iowa, once said in reply to my explanations of why his suggestion would not result in the savings he anticipated: "A food service operation is just like a balloon filled with water; you punch it in any one place and it just comes out all over."

In presenting these thoughts on building a food service budget, I am aware that few budgets or operating statements are alike or can easily be compared.

Some dining service operations are charged only with direct food costs, payroll and some few supplies. In some others a proportion of the entire overhead is charged, including administration, utilities, maintenance and depreciation. Some have incomes credited with just enough money to cover these direct expenses; there may be others with fixed predetermined charges made to the students that not only cover all costs but also allow for debt retirement and perhaps some money for other college expenses. Each college or university administration rightfully determines whether to include certain of these charges in the food service budget.

## **CALLS FOR THOROUGH REVIEW**

The building of a food service budget means the thinking through of the complete year's operation on a day-by-day, week-by-week, month-by-month basis for each operating unit of the food service. It means a careful review of last year's operations. We must review almost week by week the factors that went into those operations. If on

From a paper presented at the annual convention of the Association of College and University Housing Officers, Eugene, Ore., 1956.

a July 1 to June 30 fiscal year, we undoubtedly start budget work for the coming year in January or February. At this time we review operations to date and make another projection as to how we will come out this fiscal year.

The budget for the coming year, in fact the budget at any given time, for each food service unit is really the summary, converted to financial terms, of complete planning for the year. It represents plans, hopes, dreams and fears. Incorporated in it are the policy decisions made in order to arrive at the stated results. To do this complete planning, we must work closely with the manager because building a budget requires a knowledge and intimacy with the details of operation.

The close cooperation and participation of the person who is actually responsible for meeting the budget and putting it into operation is very important. The manager of each unit must not only see the possibility of meeting the budget, but also must appreciate that it is flexible, up or down, to meet changing circumstances. The manager must know what has gone into it so that as our operations unfold, week by week, and month by month, there is a realization of how closely the budget is being met along with the knowledge of the principles that have fashioned it.

Let us take a quick rundown of the thinking, and some of the mechanics, in the building of a contract feeding food service budget.

We will want to determine the actual days of operation for each month, and the daily credit or allocation of the food department per person, for income. In most units the total number of available contracts for the academic year is limited by the capacity of the building. We are selling a product that has little market value after September 15. There will be

some shrinkage during the year. Most of us will lose more contracts at the end of the semester or the quarter than we will sell to entering students at that time. Most of us, also, will have to subtract the number of students in residence who have board jobs. Thus we will arrive at a figure that will present the cash income from contracts daily, weekly and, finally, for each term or semester.

The summer session income must be calculated in the same way. Past experience, plus our knowledge of the coming year, is our best yardstick for calculating the guest meal income. Any conference, convention or workshop income must be accounted for. We will include an item of unclassified income for miscellaneous items. The sum of these calculations is the potential income for the coming year.

## **WHAT EXPENSES INCLUDE**

Now what will the expenses be? The first will be food cost. It should be adequate to produce satisfied customers. It should be sufficient in amount so that, with good purchasing, good management, and good preparation, nutritionally adequate meals can be served graciously.

From past experience, we know what menus, costs and absenteeism have been. We know how satisfactory the operation has been. All these are factors to be considered. Will we continue the same policies as to menu pattern and plan? Are there new factors that will change absenteeism or any other part of the food cost picture? Are costs going up or down? What are the canners and the packers in the various parts of the country doing? What is happening in the labor market? This brings us to next year's food market.

For example, we may have anticipated about a 5 per cent increase in our canned goods cost, because of the increase in container and carton costs

and increases in freight rates and labor costs. The spring crop of pigs may have been 8 per cent less than a year ago so we know pork will be somewhat higher. Our over-all estimate is that the cost of raw food may be 3 per cent higher than the previous year. These are all straws in the wind. The purchasing agent can be helpful in this matter.

With this information we still must arrive at the amount that is to be set for food cost—an amount in so many cents per day per student contract.

Whether to tighten the budget in the early part of the year so as to sweeten it in the spring is a matter of policy to be decided.

Management and supervisor salaries usually are on a 10 or 12 month basis and are easily calculated, assuming that the cooks, food service helpers, and other employes who receive cash are hired on a basis other than a 12 month guaranteed wage, whether it be per day or per month. A gross yearly salary or a wage figure for each position or person employed should be arrived at.

To do this with any accuracy means that day-by-day and week-by-week working schedules must be planned. Account should be taken of the cleanup period in the fall, the holidays, Thanksgiving, Christmas, and spring vacations, the layoffs in the summer, and the extra labor needed for football days.

We must not forget the cost of our "fringe benefits," such as insurance, social security, and retirement plans. The personnel or business office will give us a percentage figure to apply to the gross salary figure. This is to cover the cost to our department and is not included in the salary figures.

Employee meal costs will be charged to labor and credited to food cost. The employee schedule again can be used to calculate the actual number of meals each employee will eat during his work year. This number multiplied by the food cost will give the cost of employee meals. Board jobs should be calculated in the same way. I mention them separately because they are important costs in college operations.

Office expense, printing, travel, general supplies, silver, china, linen, telephone, laundry, general repairs, insurance—estimates on all these will be based upon past experience and knowledge of what is planned for the year.

Up to this point in the budget, management has control over and is responsible for food cost, labor costs, and the general expense items listed. This is in contrast to the next group of charges over which, after the policy is set, the manager has little control.

**Utilities.** These might be a direct cost if they are purchased from a utility company. If we have our own power plant and are paying, either by meter or on any estimated basis, a share of the cost of the operation of the plant, this would be an apportioned cost. The amount to estimate for next year's budget again is based upon experience and knowledge of the future.

**Equipment Replacement Reserve.** This is a charge that evenly distributes on a monthly basis the cost of replacing present equipment. It provides money in a reserve account for the purchase of new equipment when replacements are necessary. This charge is based on the estimated life of our equipment. For example, if 15 years is assumed to be the life of kitchen and dining room equipment, we would make a yearly charge of  $6\frac{1}{2}$  per cent of the original inventory value of the equipment.

**Building Repair Reserve.** This is a

### SAMPLE FOOD BUDGET FOR A WOMEN'S DORMITORY\*

(Breakfast, Cafeteria Service; Lunch and Dinner, Waitress Service)

Capacity: 1098 Contract Feeding Estimated Contracts			Cash Fountain Student Days:	
Cash:	1st Sem.	2d Sem.	Sum.	1st Sem. 114,835
864	846	207		2d Sem. 113,640
Jobs:	101	101	33	Summer 13,920
Rates:	\$ 215	\$ 215	\$ 104	
Day Rate: \$ 1.806	\$ 1.806	\$ 1.857		242,395
Operating Days:	119	119	56	Av. per student day 7.66c—Canteen 10.33c—Food
Classification	Amount	Per Cent	Amount	Per Cent
INCOME: Unclassified	\$ 120	0.03		
Guest meals and groups	19,500	4.77		
Cash sales—food			\$ 23,750	57.57
canteen			17,500	42.43
Contract—winter	367,650	89.93		
summer	21,530	5.27		
TOTAL INCOME	\$ 408,800	100.00%	\$ 41,250	100.00%
COST OF SALES NET:				
Food (less employee meals)	\$ 137,000	33.52	\$ 9,500	40.00
Canteen			14,000	80.00
Total Cost of Sales	137,000	33.52	23,500	56.97
GROSS PROFIT	\$ 271,800	66.48%	\$ 17,750	43.03%
EXPENSES:				
Salaries, retire., ins., S. S.	\$ 32,160	7.87		
Wages, emplo. meals, brd. jobs	114,600	28.03	\$ 9,300	22.55
Total Payroll	\$ 146,760	35.90%	\$ 9,300	22.55%
Direct expense:				
Office expense	\$ 250	0.06	\$ 150	0.36
Printing	200	0.05	50	0.12
Travel	150	0.04		
General supplies	3,500	0.86	1,000	2.42
Repairs	6,000	1.47	200	0.48
Silver, china, linens	3,000	0.73	50	0.12
Telephone	500	0.12	50	0.12
Unclassified	200	0.05		
Laundry	3,250	0.79		
Insurance	250	0.06	50	0.12
Apportioned expense:				
Equipment reserve	6,180	1.51	480	1.17
Building reserve	3,120	0.76	300	0.73
Admin. ovrd. university	6,570	1.62	725	1.76
Admin. ovrd. departmental	10,740	2.63	720	1.75
Utilities	7,500	1.83	350	0.85
Total	\$ 51,410	12.58%	\$ 4,125	10.00%
Total Expense	\$ 198,170	48.48%	\$ 13,425	32.55%
BALANCE FOR DEBT SERVICE	\$ 73,630	18.00%	\$ 4,325	10.48%

\*Based on the assumption that all employees work a 44 hour week (eight hours per day straight shift) and the wage scale ranges from \$1.034 per hour for a food service helper to \$1.437 per hour for a first cook.

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charge that evenly distributes on a monthly basis the cost of repairs to the building, such as a new roof or a major redecorating job. One way of doing this is to set up a charge based on 2 per cent of the cost of the building, determining a division between the house and the dining area. This is not money set aside to build a new building or to replace the present one.

*Administrative Overhead.* If the dining service is to pay its share of the university's administrative charges, such as the cost of operating the president's office, business office, personnel, public

relations, central purchasing, treasurer's office, and so forth, this undoubtedly would be charged on one of several bases. For example: (1) a flat amount; (2) a per cent of income; (3) a per cent of expenses, such as 2 per cent of the expenses of each unit.

*Departmental Administrative Costs.* The costs of operating the office of the director of residence halls and/or the office of the director of food service must be prorated to the various units. One method is on the basis of expected gross income.

At this point it is simple to say:

### SAMPLE FOOD BUDGET FOR A MEN'S DORMITORY\* (Cafeteria Service) Capacity: 1066

	Contract Feeding Estimated Contracts			Cash Fountain Student Days:
Cash:	1st Sem.	2d Sem.	Sum.	1st Sem. 114,121 2d Sem. 112,320 Summer 6,264
Job:	63	63	4	
Rate:	\$ 215	\$ 215	\$ 104	
Day Rate:	\$1,806	\$1,806	\$1,857	232,705
Operating Days:	119	119	56	Av. per student day 4.07c—Canteen 5.04c—Food
Classification	Amount	Per Cent	Amount	Per Cent
INCOME: Unclassified	\$ 200	0.05		
Guest meals and groups	22,000	5.32		
Cash sales—food			\$ 11,725	55.31
canteen			9,475	44.69
Contract—winter	380,335	92.01		
summer	10,815	2.62		
TOTAL INCOME	\$413,350	100.00%	\$ 21,200	100.00%
COST OF SALES NET:				
Food (less employee meals)			\$ 4,700	40.09
Canteen	\$177,750	43.00	7,770	82.00
Total Cost of Sales	\$177,750	43.00%	\$ 12,470	58.82%
GROSS PROFIT	\$235,600	57.00%	\$ 8,730	41.18%
EXPENSES:				
Salaries, retirement, insurance	\$ 20,750	5.02%		
Wages, brd. jobs, employee meals	106,150	25.68	\$ 5,735	27.05%
Total Payroll	\$126,900	30.70%	\$ 5,735	27.05%
Direct expense:				
Office expense	\$ 300	0.07%	\$ 25	0.12%
Printing	250	0.06		
Travel	200	0.05		
General supplies	2,750	0.67	250	1.18
Repairs	4,000	0.97	300	1.42
Silver, china, linens	2,500	0.60	25	0.12
Telephone	250	0.06	50	0.24
Unclassified	100	0.02		
Laundry	2,250	0.54	75	0.35
Insurance	200	0.05	50	0.24
Apportioned expense:				
Equipment reserve	6,660	1.62	240	1.13
Building reserve	4,980	1.20	240	1.13
Admin. ovhd. university	6,960	1.68	400	1.88
Admin. ovhd. departmental	10,860	2.63	360	1.70
Utilities	3,750	0.91	250	1.18
Total	\$ 46,010	11.13%	\$ 2,265	10.69%
Total Expense	\$172,910	41.83%	\$ 8,000	37.74%
BALANCE FOR DEBT SERVICE	\$ 62,690	15.17%	\$ 730	3.44%

\*Based on the assumption that all employees work a 44 hour week (eight hours per day straight shift) and the wage scale ranges from \$1.034 per hour for a food service helper to \$1.437 per hour for a first cook.

"Add the expenses and subtract them from income, and you have the amount of debt service or whatever the school policy determines the balance should go for." Most of us think in terms of debt service. It is at this point also that we apply various yardsticks to see if the debt service is adequate: per cent of income, amount per paying contract, amount per bed, or whatever we use. Do we have enough to pay the bankers? It is also at this point that, if the figures are realistically arrived at, we face the question of whether the rate stays the same or must be raised or lowered, and other policy questions involving costs.

If the food service unit we are building a budget for is not a contract feeding unit but is of the public cafeteria type, then income estimates will be based upon the number of covers per meal times the average check per meal. The food cost will be a per cent of income based upon our price scale and needs.

In calculating the income for soda fountains and canteens, one method is to use an average sale per student day for such food sales as sandwiches, snacks and soda fountain and grill items, and an average sale per student day for canteen sales, which would be cigarettes, newspapers, candy and toilet items. To arrive at this we take the number of days of operation during the year times the number of students housed and divide it into both food income and canteen income. This gives an average student-day income for food and an average student-day income for canteen items.

These averages, multiplied by the expected student days in the next fiscal year, provide the basis of estimated income for canteens and fountains.

Building a food budget is a continuing job throughout the year. Most of us have to make revisions and adjustments about October 1, March 1, and possibly May 1. It is only after school opens in the fall that we really know how many people we have on the campus and how many contracts are sold.

The reason for food service budgets and food services effort is to produce good food and satisfied customers. We must have in the budget plenty of good food and some good and gracious living. Edmund Burke, in 1796, in his "Letter to a Noble Lord" said: "Mere parsimony is not economy. . . . Expense, and great expense, may be an essential part of true economy."

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# NEWS

**Harvard College Sets Goal at \$82½ Million . . . Scholarships Go Begging Each Year . . . College Discontinues Athletic Grants . . . New York State to Spend \$417 Million for Higher Education . . . Free Tuition for Faculty's Children**

## **15,000 Scholarships Go Unused Each Year**

WASHINGTON, D.C.—A recent study by B'nai B'rith, Jewish service organization, revealed more than 15,000 college scholarships go begging every year because the right people never hear about them.

Some of these scholarships are restricted to persons with certain names; others are so restrictive that it's hard to find people entitled to them.

According to Dr. S. Norman Feingold of Boston, who made the scholarship survey for the B'nai B'rith Vocational Service, "there is money available for the study of everything from aeronautical engineering to zoology" if the right person applies for it. Dr. Feingold reported that among little known sources of help were the following cases: a fund for farmers' daughters, at Carleton College, Carleton, Minn.; a scholarship for a person who has earned a reputation for truth and honesty, at Oberlin College, Oberlin, Ohio; paid tuition of a religious person from Missouri, at Dartmouth College, Hanover, N.H.

Dr. Feingold reported that \$60 million was paid out in scholarships and student loans last year by the National Merit Scholarship Corporation, by such organizations as B'nai B'rith itself, and by corporations and foundations.

Robert Shostak, vocational research director for B'nai B'rith, estimated the 15,000 scholarships that go unclaimed are worth about \$6 million a year.

## **Seek \$82½ Million for Harvard College**

CAMBRIDGE, MASS.—Dr. Nathan M. Pusey, president of Harvard University, recently announced plans by the institution to raise \$82½ million for Harvard College within the next three years. This is considered to be the

largest sum ever sought by a public campaign to support undergraduate education at an institution. The entire amount is earmarked for the college, as distinct from other divisions of the university.

Dr. Pusey stated that, although the amount sought is large, "in reality it is a small share of the immense needs of American colleges and universities." He stated that the effort must be successful if Harvard is to fulfill adequately the increasing demands made on it.

## **Tuition and Salaries Increase at Wagner**

NEW YORK.—Faculty salaries at Wagner College on Staten Island will be increased, starting September 1. A higher tuition rate will go into effect to help cover the revised salary scale. Additional funds will be obtained from the income of a grant from the Ford Foundation.

Next fall the annual salary of a full professor will be \$7440; an associate professor, \$6480; an assistant professor, \$5760, and an instructor, \$5040.

## **Free Tuition for N.Y.U Faculty's Dependents**

NEW YORK.—Beginning September 1, the children of faculty members of New York University will be able to enroll at N.Y.U. tuition free. The ruling applies only to the undergraduate schools of the university.

In addition to full-time faculty members' children being eligible for this tuition remission, employees of equivalent administrative rank will be eligible for tuition remission for their dependents. Until now such students have received remission of only half the tuition fees.

The new program is part of an overall plan of increased faculty fringe benefits that take effect in the fall.

## **Discontinue Athletic Grants at Hartwick**

ONEONTA, N.Y.—Hartwick College recently announced that it will discontinue a policy of special athletic grants. In the past the college has allocated to the athletic department a sum of money each year for such grants.

In announcing the action by the board of trustees, President Miller A. F. Ritchie stated: "Beginning with the fall semester of 1957-58 students of athletic ability may apply to the committee on scholarships and service grants and the same criteria will be applied to them as to other students. All student aid recipients will have to reapply for aid annually.

"Financial assistance will be given to students on the basis of academic excellence, qualities of all-round development, and evidence of financial need," Dr. Ritchie said. Control of the assistance granted will be in the hands of an academic faculty committee, and students will receive aid under three categories: academic scholarships, grants-in-aid, and working grants.

Present athletic grant commitments will be honored, but athletes in the future will make application according to the new policy.

## **Brandeis to Feature Classroom Variation**

WALTHAM, MASS.—Two new buildings at Brandeis University will feature a new concept in classrooms. Student chairs and blackboards will be eliminated, and in their place will be a series of classroom lounges, around which will be placed original manuscripts, portraits and source material relating to the courses offered.

The buildings are being designed by Harrison & Abramovitz, New York architectural firm that planned Brandeis' three-chapel interfaith area.



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## \$417 Million Expansion for New York State

ALBANY, N.Y.—According to present plans, the state of New York will launch the greatest building program for public higher education in its history. Within the next five years the state is expected to spend about \$417 million to expand the State University. In the fall, a \$250 million bond issue to begin underwriting the program will be submitted to the voters.

According to reliable observers, several issues are involved before final

determination is made as to objectives of the program: (1) a decision between the board of regents and the board of trustees of New York as to which group shall be responsible for the planning and setting up of the university; (2) opposition by private colleges to the creation of an inclusive system of public higher education which will encompass liberal arts, graduate and professional programs. There seems to be some conflict, also, between the board of regents and the board of trustees as to the wisdom of establishing low tuition institutions.

Research to date has indicated that New York is very low on the list of states making provision for public facilities for higher education. The proposed program is expected to improve the status of the state of New York in this regard.

## Integration Gains in Two Southern States

ATLANTA, GA.—According to a recent survey by the United Press, public colleges of Virginia and North Carolina have been successful in integrating Negro students into many institutions within their state borders with no unfavorable incidents being reported.

According to the report, Virginia state colleges have been accepting Negroes since 1953. Four colleges in the state now have a total of 41 enrolled.

Three Negroes have been admitted to the University of North Carolina at Chapel Hill, but are the only Negro undergraduates there now, although they were admitted two years ago. However, seven Negro graduate students are enrolled at Chapel Hill, and State College of North Carolina at Raleigh has started enrolling both graduate and undergraduate Negroes who qualify.

The University of Virginia at Charlottesville has 21 Negroes enrolled. Most are doing graduate work in the field of medicine or law, but there are several undergraduates in engineering. Virginia Tech has six Negro students; Richmond Professional Institute has five, and the Medical College of Virginia has nine.

In Virginia the policy has been to admit those Negroes desiring courses not available at Virginia State College in Petersburg, the only state supported college solely for Negro students.

Deans at all four of the Virginia institutions reported that no trouble has arisen because of the Negro students.

## Three New Residences Will House 1488 Men

COLUMBUS, OHIO.—Contracts for the construction at Ohio State University of three men's residence halls—largest building project since the new Health Center—has been recommended by the university's board of trustees to the state director of public works for awards.

Presented to the board by Vice President and Business Manager Jacob



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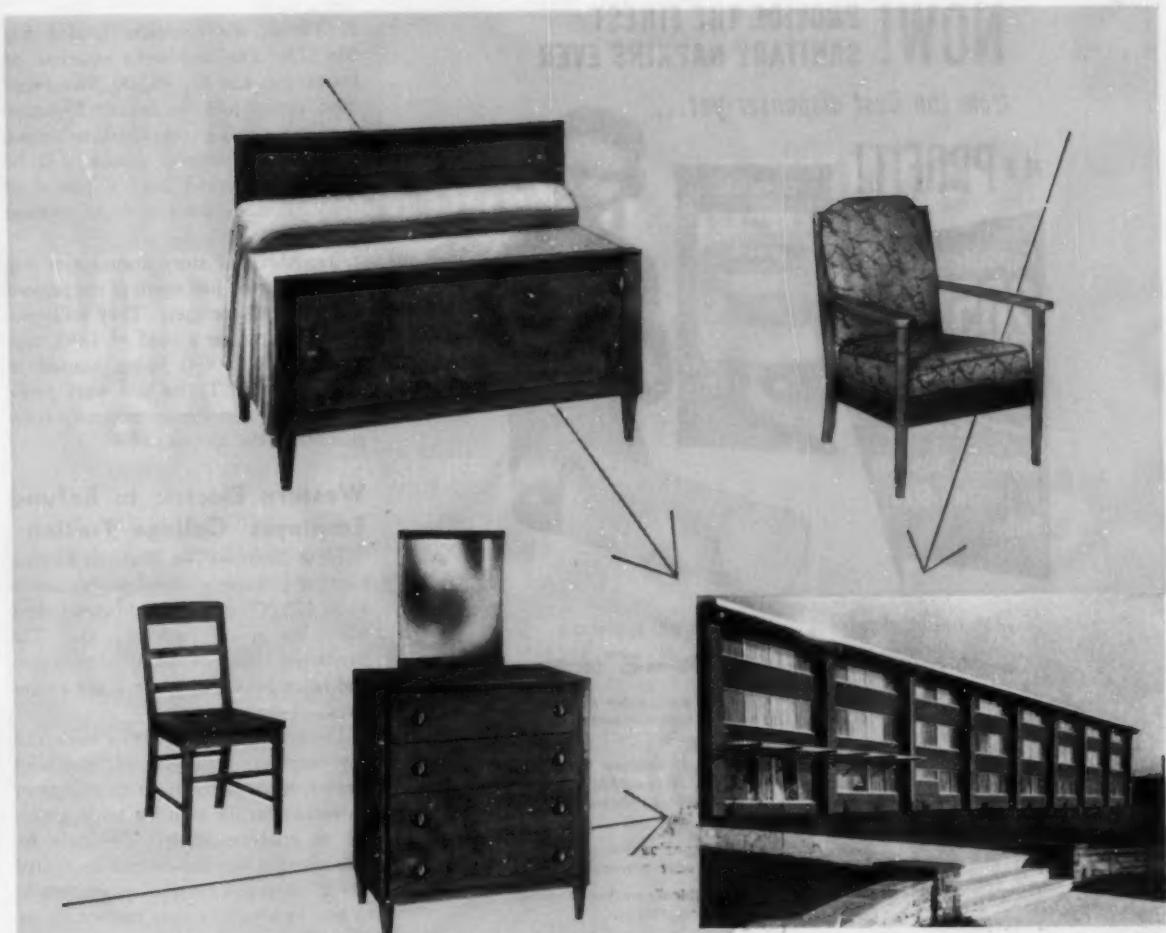
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B. Taylor, the contracts totaled \$6,054,175. The architect's estimate on the project was \$7,186,300, Vice President Taylor told the board. Financial details are being completed, he added, after which revenue bonds will be issued and retired over a period of years through income from student rentals.

The three 11 story dormitories will be constructed just south of the present Baker's Hall for men. They will provide housing for a total of 1488 men students, with 496 being housed in each unit. Mr. Taylor said work probably would start this month, with completion in the autumn of 1958.

**Western Electric to Refund  
Employees' College Tuition**

NEW YORK.—The Western Electric Company recently issued an invitation to its 125,000 employees to further their education at company expense. The invitation extends from messengers and office boys to engineers and executives.

The company will pay the tuition of any employee, regardless of length of service, who wants to go to college or university on his own for undergraduate or graduate study. The only requirement is that the courses be related to the employee's current assignment or to one to which he may reasonably aspire. The company refunds the tuition in two payments: one after registration and the other when the employee has satisfactorily completed the course.

Called the Tuition Refund Plan, the program will provide up to \$250 a year in tuition to an employee who can meet the academic requirements of the college or university of his choice.

Arthur B. Goetze, president of Western Electric, said: "The program has a twofold aim: We hope to encourage our new young employees to continue their studies as they begin their careers and to make it possible for experienced employees to broaden their education and keep abreast of new developments."

**Rename Two Colleges**

DENVER.—Gov. Steve McNichols of Colorado recently signed legislative bills changing the names of two Colorado state colleges. Colorado A & M College at Fort Collins will become Colorado State University on May 1. Colorado State College of Education at Greeley will become Colorado State College October 1.

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## Housing Survey Reveals Students Pay Low Rent

BERKELEY, CALIF.—More than 40 per cent of the students at the University of California, Berkeley, who live in private rooms, at home, or share apartments, pay \$25 per month or less for rent.

This is one of the findings of a survey conducted by the university housing office under its supervisor, Ruth N. Donnelly, of 15,706 students out of last fall's total registration of 17,910 at Berkeley.

Those who paid \$25 or less rent comprised 51.8 per cent of the men in the survey and 36.4 per cent of the women. The fact that most of the students who live at home pay no rent partially explains the large number in the low rent bracket, it was found.

Of the students registered last fall who pay their room and board on a semester basis, 23.8 per cent spent between \$351 and \$375, the survey shows, while 19.5 per cent of these students fell into the \$376 to \$400 category. Twenty-five per cent of the women students surveyed were in the

latter bracket, as were 15.3 per cent of the men. In each succeeding higher cost bracket for semester room and board, there are more than twice as many women as men students. Conversely, in the lowest cost bracket for room and board expenses, there are more men than women—16.8 to 10.7 per cent, respectively. The greater number of men's low cost cooperative living groups is said to account for this situation.

The university's semi-annual residence survey also included for the first time commuting data on distance to campus and mode of transportation. It found that more than 30 per cent of the students questioned drive cars to campus. Another 60.9 per cent walk, and 1.8 per cent cycle. The rest arrive by public transportation.

## Rider College Plans \$10 Million Program

TRENTON, N.J.—Rider College, which last year became an accredited college with a four-year curriculum leading to a bachelor's degree, is planning a \$10 million replacement and expansion program. The program is designed to consolidate and improve the institution's facilities and to enable it to double its enrollment.

Present plans call for the removal of the college to a 140 acre campus recently acquired in a near-by township. A complete new group of buildings will be erected to replace the present widely scattered structures.

The first phase of the construction program is the establishment of a combined gymnasium and auditorium, followed by administration, classroom and science buildings, a dining hall, and three residence halls.

The second phase of the program includes the building of eight more residence halls, two more classroom units, and a library. A football stadium and an expansion of athletic facilities is contemplated as the third and final phase.

No time limit has been set for the program, but officials of the 92 year old institution are hopeful that freshman classes can be moved to the new campus before the close of 1958.

At present the college has only \$100,000 on hand for the program. A campaign for funds among alumni will begin this spring, and administrative officials are hoping to be able to obtain some federal aid for the construction of residence halls.



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## Temporary Merger of Housing Facilities

OAKLAND, CALIF.—The two colleges for women in the East Bay area near San Francisco have joined forces in an unprecedented community venture. Nearly a hundred students and Sisters of the College of the Holy Names began a short-term residency at Mills College last month.

Because their former Lake Merritt campus was completely demolished by the new Kaiser Center construction project, 83 girls and several faculty

Sisters have taken over occupancy of Mills Graduate House as temporary quarters pending completion of residential facilities on a new site in the foothills of East Oakland.

Last month's mass move culminates negotiations that began last summer between Paul J. Cushing, president of the executive committee, and Sister Imelda Maria, president of the College of the Holy Names, and Robert F. Hitchcock, vice president and treasurer of Mills College.

Following the \$2.5 million sale of the 88 year old Lake Merritt college

grounds in June 1955, the Sisters and students were confronted with the problem of where to live during construction of the newly purchased 33 acre campus at 3500 Mountain Boulevard. Faced with a mid-January vacating deadline, an approach was made to Mills College. Mills officials welcomed the idea and entered into rental agreement for Graduate House.

## Business and Industry Support E.S.F.I.L.A.C.

NEW YORK.—Contributions totaling \$657,300 have been made to the Empire State Foundation of Independent Liberal Arts Colleges, it was announced recently in a progress report covering the four years of the foundation's operation. The Empire State Foundation is an organization of 23 nontax-supported colleges and universities in New York State founded in 1952 for the purpose of soliciting funds from business and industry.

The contributions, covering the 1952-56 period, have been made to the foundation by 145 national, state and local corporations, including manufacturing firms, banks, railroads, airlines, utilities and other types of industry.

In 1952-53, the first year of operation, \$38,500 was contributed to the foundation; in 1953-54, \$128,440 was contributed; in 1954-55, \$192,400, and in 1955-56, \$298,000. A goal of \$500,000 has been set for the 1956-57 year.

## Cornell Increases Its Board, Room Charges

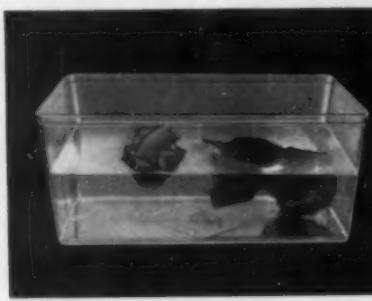
ITHACA, N.Y.—Cornell University's board of trustees has authorized an increase in board and room charges, to go into effect on July 1.

The combined board and room charge in women's residence halls will go from \$895 to \$990 per year. Room rates in men's dormitories will increase an average of \$25 a year, from the present range of \$255-\$355 to a range of \$280-\$380 per year.

The increases are reluctantly made, President Deane W. Malott said, but are absolutely necessary to meet rises in labor, food, materials and other charges.

In 1955-56, the university's dining service operated with a deficit. While the residence halls were operated without a deficit that year, the current year will probably bring losses in both divi-

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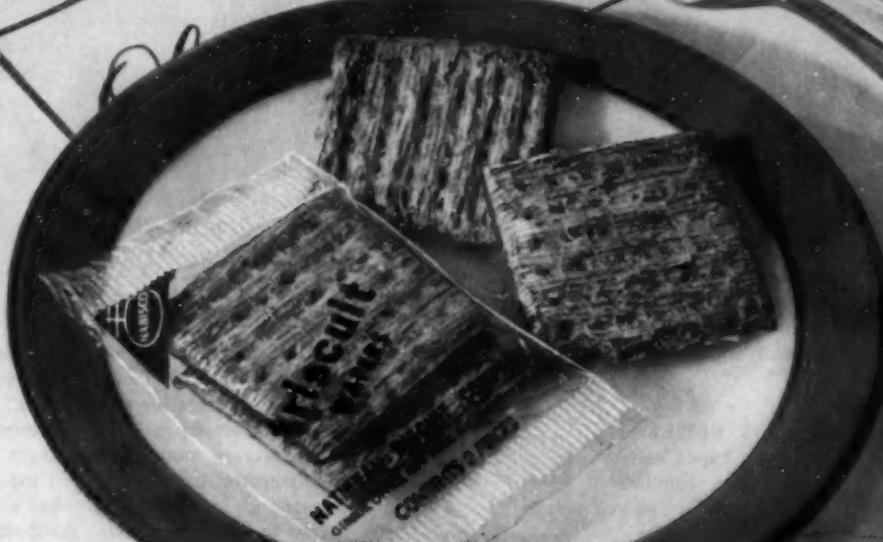
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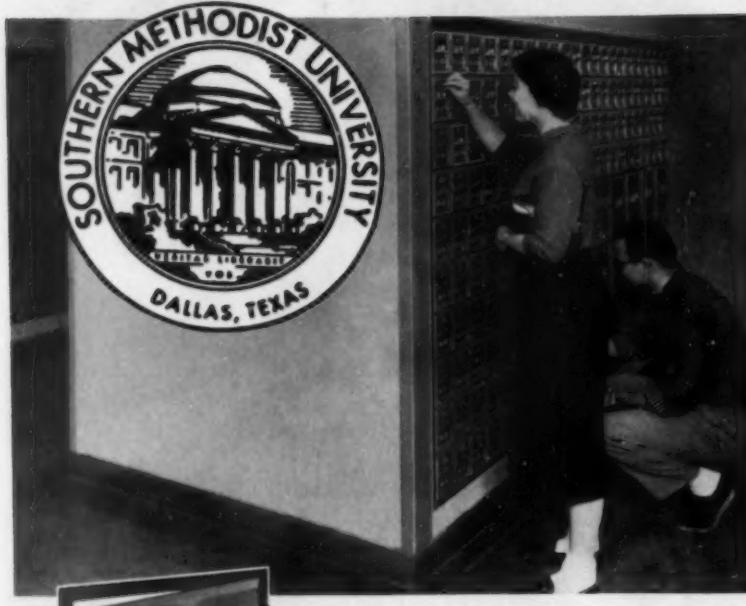
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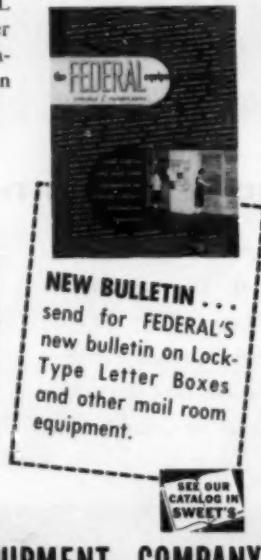


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sions, he added. The last increase in the women's dormitory contract rate was made seven years ago, he said; and in men's dormitory rates, five years ago.

## Denies Decline in Teaching of Science and Mathematics

WASHINGTON, D.C.—Dr. Howard L. Bevis, former president of Ohio State University and chairman of the National Committee for the Development of Scientists and Engineers, recently took issue with criticisms directed at high school science and mathematics programs.

Dr. Bevis challenged as "inaccurate, unfair and fallacious" the charges that were made that half of America's high schools teach neither physics nor chemistry; that the number of chemistry pupils had declined 30 per cent in the last 60 years, and that in one-third of the states a person does not have to study college mathematics to get a certificate to teach mathematics in high school.

In regard to course offerings and enrollments, Dr. Bevis cited a recent study by the United States Office of Education that contradicted many of these charges. His committee has found the U.S.O.E. findings to be accurate. He pointed out, however, that these findings deal only with the numbers of high school students pursuing courses in science and mathematics and that "how well they are taught is something else again." Dr. Bevis observed that the enrollment of engineering students at colleges and universities had increased in the past year and, though the nation had a long way to go before meeting the demands of industry for some 100,000 new engineers, that a very substantial improvement in the situation had been made.

## Harvard Gives \$1 Million in Scholarship Aid to 1230

CAMBRIDGE, MASS.—Harvard College reported that it is providing considerably more than \$1 million in financial aid, and that nearly half of its 4430 undergraduate students are recipients of such aid.

This outlay is the largest in Harvard history, according to Wilbur Bender, dean of admissions and financial aids. Scholarship aid to 1230 students accounts for \$1,025,000, with long-term loans and student earnings from part-



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Doors shall be hung on WEIS gravity hinges with upper hinge mounted in recess in edge of door. Doors shall be fitted with slide bar latch, combination keeper and bumper and coat hook with rubber-tipped bumper, all to be brass, chromium plated. Latches and coat hooks shall be attached with theft-resistant screws.

time employment, mainly at the university, making up the balance.

Some 550 students will receive \$225,000 in loans that are free of interest until the borrower completes college or graduate school. Short-term emergency loans amount to \$25,000.

The student employment office has placed 1200 students in part-time work in residence halls, dining halls, and university offices. For this work, they will receive more than \$450,000 in wages. It is estimated that \$200,000 in wages will be earned in jobs outside the university.

The increase in financial aid was made after tuition went up \$200 to reach a figure of \$1000 last fall. Dean Bender has stated that the college is determined that "no undergraduate will be forced to withdraw solely because he cannot meet increased costs of education."

### Penn State Boosts Fees and Room Charges

UNIVERSITY PARK, PA.—Steadily rising costs brought the first boost in student fees at the Pennsylvania State University since 1953.

Under the new schedule, undergraduate men and women hereafter will pay \$140 a semester, an increase of \$14 for men and \$12.50 for women.

Graduate student fees also were increased from \$120 to \$134 and non-resident student fees from \$251 to \$290.

The continued rise in enrollment, necessitating the hiring of additional faculty members, plus higher operating costs, and necessary increases in wages and salaries, were the major reasons cited for what university officials described as "a very modest increase."

In a companion move, room charges for a double room were raised \$5 a semester, from \$105 to \$110, and meal charges were increased from \$230 to \$235 a semester.

General extension fees, including those applied to undergraduate centers preparing a student for a baccalaureate degree, also were raised.

### NAMES IN THE NEWS

**Dr. John Paul Leonard**, president of San Francisco State College, has been made president of the American University of Beirut in Lebanon. The post has been vacant since the death of Dr. Stephen B. L. Penrose Jr. in December 1954. Dr. Leonard has been president of San Francisco State College for the last 12 years.



John Paul Leonard

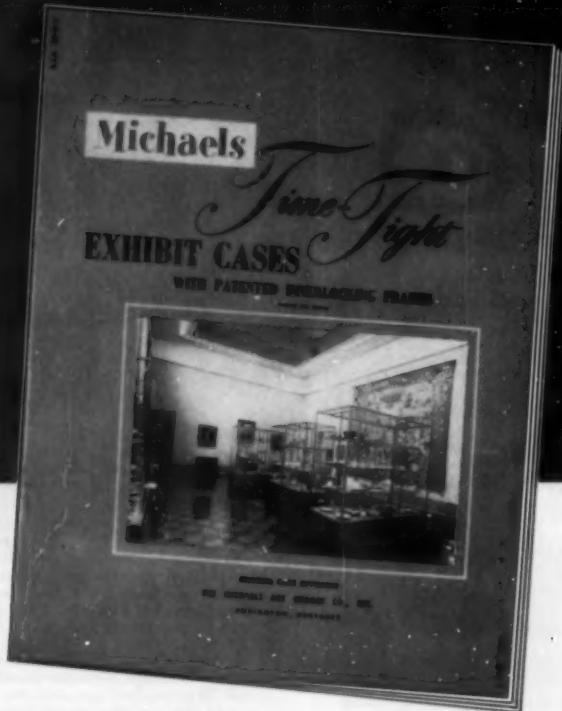
**Dr. H. Wilbert Norton**, dean of education at Trinity Seminary and Bible College in Chicago, has been named president. **Dr. Arnold T. Olson**, president of the Evangelical Free Church of America, sponsor of the institution, announces. Dr. Norton will succeed **Dr. T. B. Madsen**, professor of church history and philosophy and acting president since September 1955.

**Frank E. Taplin**, Cleveland attorney and corporation executive, has been appointed assistant to the president of Princeton University. Mr. Taplin, a graduate of Princeton in the class of 1937, will succeed **Col. Arthur E. Fox**, a former army career officer who has held the post since 1945.

**Mary Schlenck**, director of residence halls at Miami University, Oxford, Ohio, since 1921, recently announced her retirement, effective June 1.

**John J. O'Connor**, formerly associated with the research division of the  
*(Continued on Page 76)*

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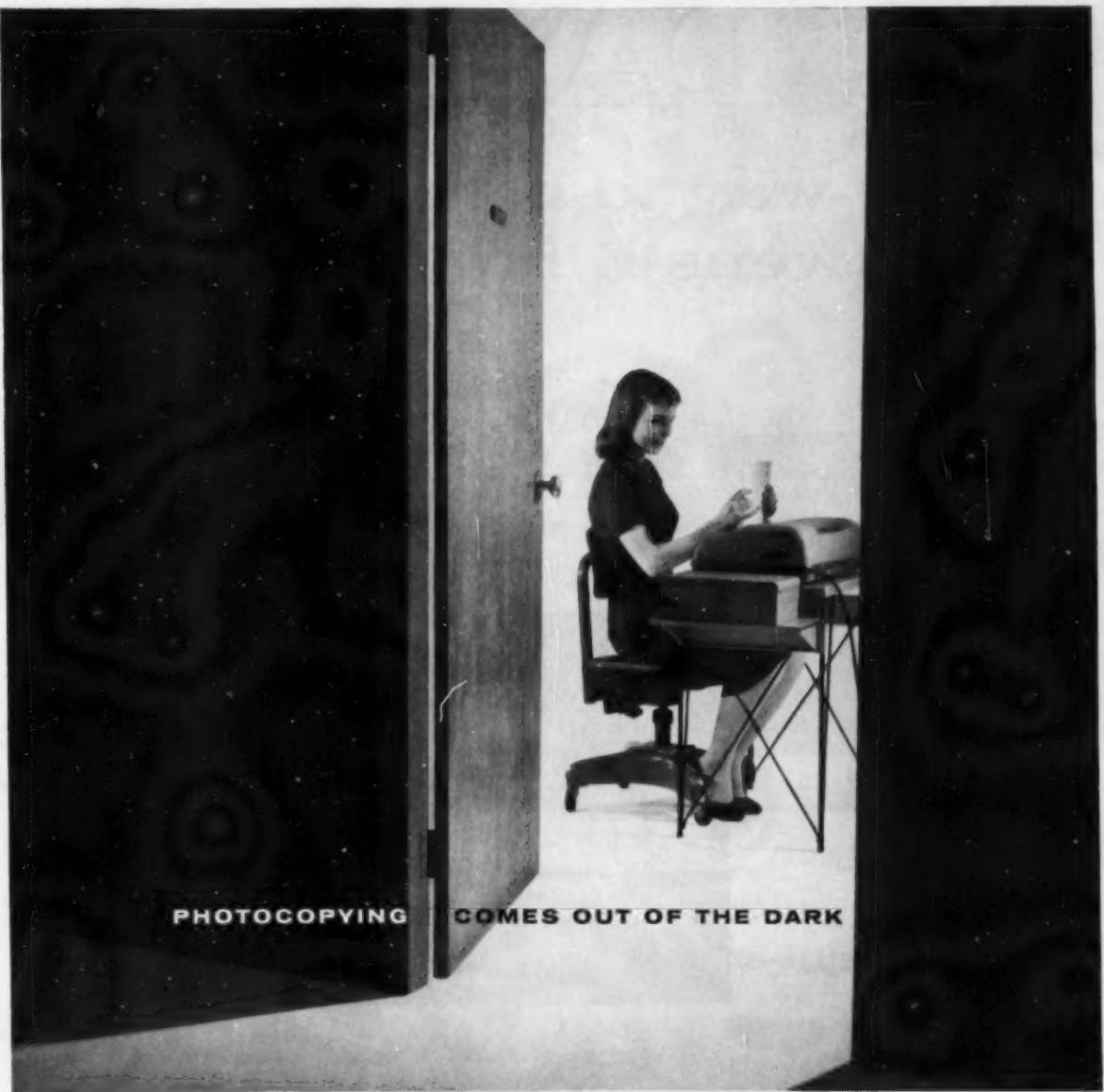


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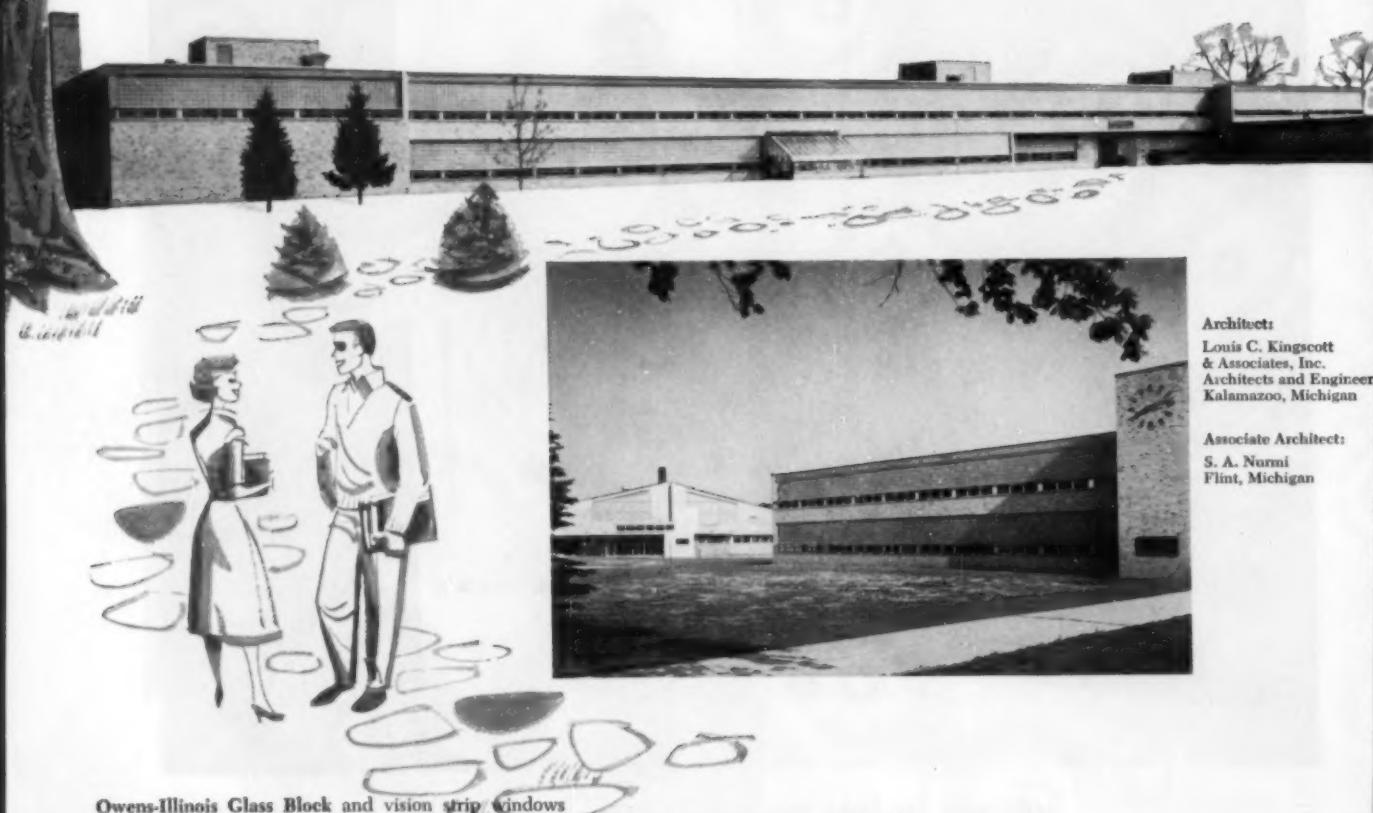
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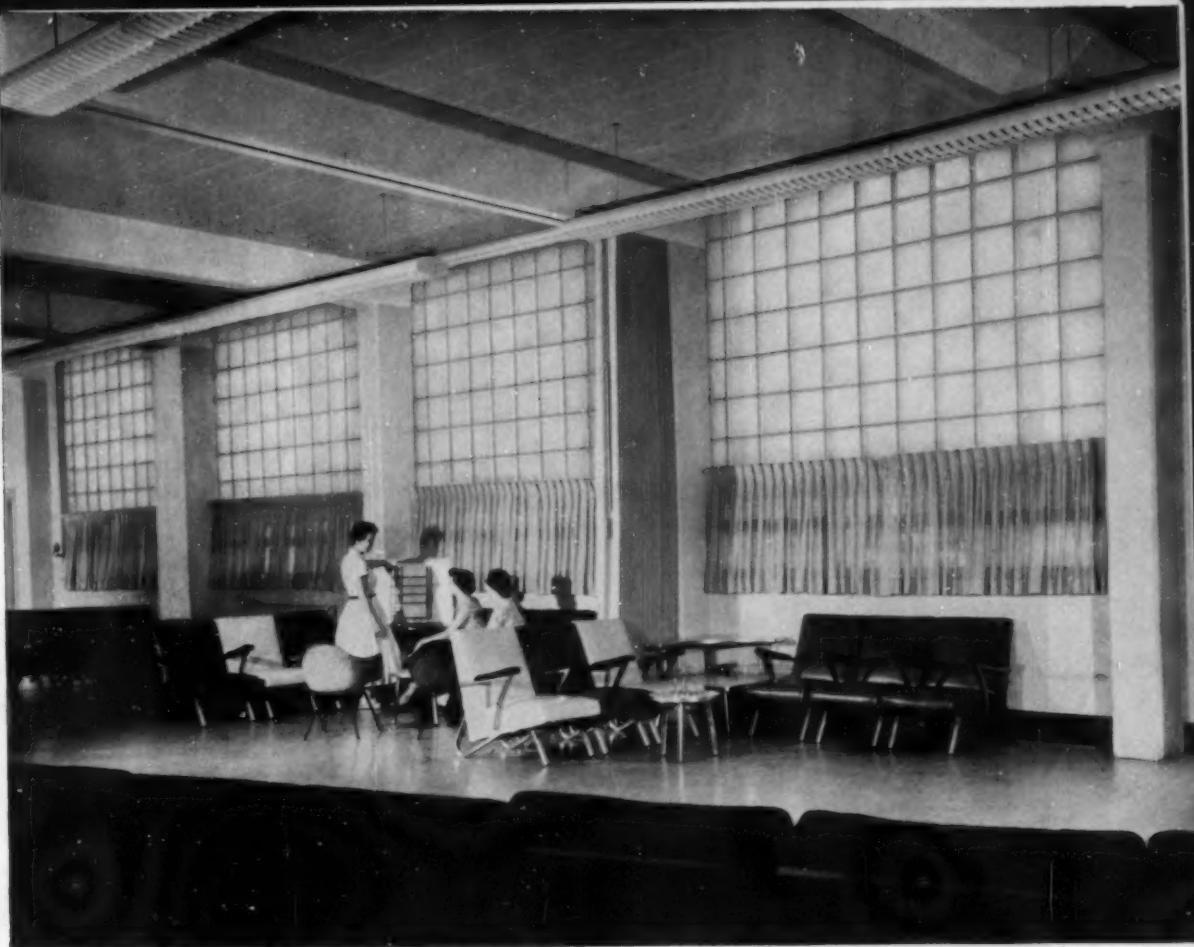
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(Continued From Page 72)  
American Cyanamid Company, has been named assistant to the president of Fordham University, New York.

**Richard T. Bystrom**, manager of Michigan State University's Brody group of residence halls since August 1955, has been named director of the new university center at Miami University, Oxford, Ohio. Mr. Bystrom will begin his new work April 1.



Richard T. Bystrom

**J. Harold Passmore**, business manager of Friends School in Baltimore, is to succeed **Howard M. Buckman** as superintendent-treasurer of George School, Bucks County, Pennsylvania. He will take over when Mr. Buckman retires July 31.

**Donald D. McCuaig** is acting director of the Dartmouth College news service. He succeeds **Frank Pemberton**, who resigned to accept a public relations post at Harvard College.

**Walter A. Snickenberger**, formerly assistant to the president at Cornell University, Ithaca, N.Y., will be the new university registrar, succeeding **Eugene F. Bradford**, who is retiring in June.

**Robert E. Heywood**, formerly a member of the University of Illinois business office staff, is now controller of Wayland Academy, Beaver Dam, Wis.

**Dr. Kenneth H. Freeman**, dean of the State University Teachers College, Geneseo, N.Y., has been named presi-



Kenneth H. Freeman



Warren L. Conner

dent of Christian College, Columbia, Mo., to succeed **Dr. J. C. Miller**, who retired after serving 18 years as president. College authorities also announced the appointment of **Warren L. Conner** as financial secretary of Christian College, succeeding **R. A. Miller**, who retired.

**Frank Van Dyke**, vice chairman of the Western Interstate Commission for Higher Education, has succeeded **Dr. Ward Darley** of the University of Colorado as chairman of the commission. Dr. Darley resigned as president of

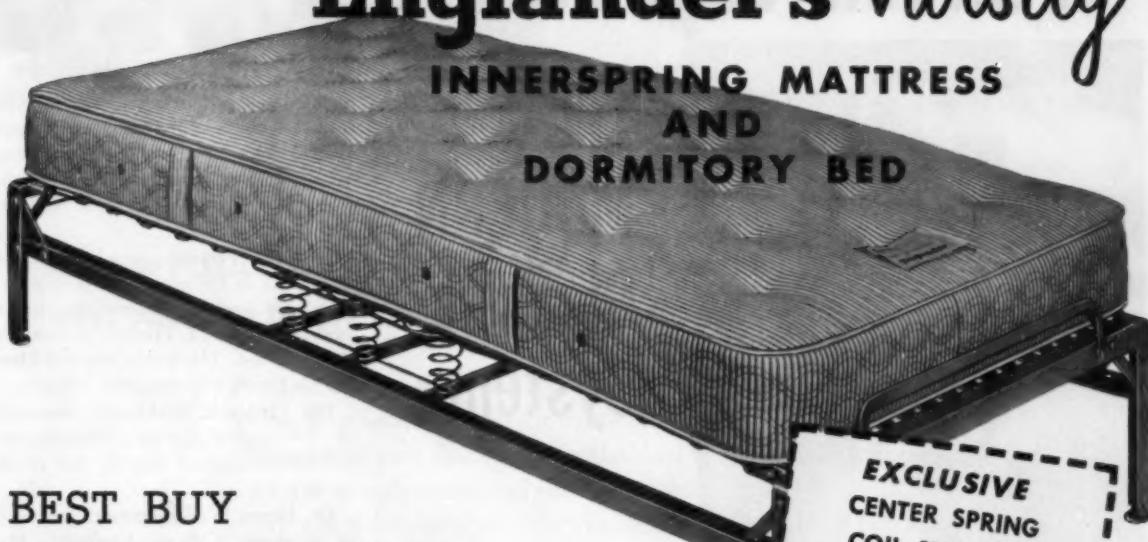
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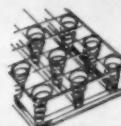
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# England

THE FINEST NAME IN SLEEP

the University of Colorado to become executive director of the Association of American Medical Colleges, Evanston, Ill.



James T. Frye

James T. Frye, formerly controller of South Georgia College, Douglas, is now assistant director of finance and business at the University of Maryland, College Park, according to a recent announcement by C. Wilbur Cissel, director of

the division of finance and business at Maryland.

Richard T. Cliggott, former alumni field secretary of Cornell University, Ithaca, N.Y., and more recently associated with Procter and Gamble Company, is now administrative assistant to J. L. Zwingle, vice president of Cornell.

Paul F. Mullin, formerly a member of the department of buildings and grounds at Drexel Institute of Technology, Philadelphia, is now the purchasing coordinator, a newly created post at Drexel.

Dr. Michael A. Farrell, director of the agricultural experiment station and associate dean of the college of agriculture at Pennsylvania State University, has been named vice president for research. C. S. Wyand, executive assistant to the president at the university, has been ap-



Michael A. Farrell



C. S. Wyand



Lawrence E. Dennis

pointed vice president for development, and Lawrence E. Dennis has been named vice president for academic affairs. The appointments were announced recently by Dr. Eric A. Walker, Penn State president.

John A. Perkins, president of the University of Delaware, has been nominated by President Eisenhower to be undersecretary of Health, Education and Welfare. He would succeed Harold C. Hunt, who resigned recently.

Dr. Frederick Burkhardt, president of Bennington College, Bennington, Vt., has announced that he will retire on July 1.

Dr. Henry W. Dinkmeyer, president of Elmhurst College, Elmhurst, Ill., died of a heart attack on February 16, one day before his 65th birthday. He had been president since 1948.

Dr. Everett Carleton Herrick, president emeritus of Andover Newton Theological School, Newton, Mass., died last month at the age of 80.

Dr. John E. Brown Sr., founder of John Brown University, Siloam Springs, Ark., died February 12 in his California home. He was 77 years old.

Dr. James A. Blaisdell, former president of Pomona and Claremont colleges in California, died recently at his Claremont home at 89 years of age. Dr. Blaisdell retired in 1937.

Albert S. Johnson, 65, treasurer and controller of Rutgers University for the last 30 years, died February 21. He had planned to retire in June.

John Wayne Richards, 78, headmaster of Lake Forest Academy, Lake Forest, Ill., for 28 years prior to his retirement in 1941, died Feb. 27 in Columbus, Ohio.

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- VACUUMING—Stairs, entryways, Venetian blinds, walls, furniture are quickly and completely cleaned with Spencer vacuum. Attaching hose to Vacuslot valves is as quick and simple as plugging into an electrical outlet.



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P118  
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1/2 H.P.



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## DIRECTORY OF ASSOCIATIONS

### National Federation of College and University Business Officers Associations

President: Nelson A. Wahlstrom; University of Washington; vice president: Thomas E. Blackwell, Washington University, St. Louis; secretary-treasurer: C. H. Wheeler III, University of Richmond.

### College and University Personnel Association

President: James N. Ewart, California Institute of Technology; secretary-treasurer: Shelton F. King, Carnegie Institute of Tech-

nology; executive secretary: Donald E. Dickason, University of Illinois. Permanent headquarters, 809 S. Wright St., Champaign, Ill.; Kathryn Hansen, editor, C.U.P.A. Journal.

Convention: Aug. 4-7, University of Colorado, Boulder.

### National Association of Educational Buyers

President: M. T. Tracht, Illinois Institute of Technology; executive secretary: Bert C. Ahrens, 1461 Franklin Ave., Garden City, N.Y. Convention: April 30-May 3, Sheraton Gibson Hotel, Cincinnati.

### Association of College and University Housing Officers

President: Donald W. Kilbourn, Central Michigan College; secretary-treasurer: Leonard A. Schaadt, University of Michigan.

Convention: Aug. 4-7, Ypsilanti, Mich.

### National Association of College Stores

President: Ray Vanderhoef, Iowa Supply Co., Iowa City, Iowa; general manager: Russell Reynolds, Box 58, 33 West College Street, Oberlin, Ohio.

Convention: April 23-27, Sherman Hotel, Chicago.

### National Association of Physical Plant Administrators of Universities and Colleges

President: A. F. Gallistel, University of Wisconsin; secretary-treasurer: A. F. Gallistel, University of Wisconsin.

Convention: May 13-15, Temple University, Philadelphia.

### Associations of College and University Business Officers

#### American Association

President: Harold K. Logan, Tuskegee Institute; secretary: B. A. Little, Southern University.

Convention: May 2-4, Hampton Institute, Hampton, Va.

#### Central Association

President: Roscoe Gate, University of Oklahoma; secretary-treasurer: Ralph Olmsted, Evansville College, Evansville, Ind.

Convention: March 31-April 2, Shamrock Hotel, Houston, Tex.

#### Eastern Association

President: John Schlegel, Lafayette College; secretary-treasurer: Kurt M. Hertzfeld, University of Rochester.

#### Southern Association

President: R. K. Shaw, Florida State University; secretary: C. O. Emmerich, Emory University.

Convention: March 14-16, Francis Marion Hotel, Charleston, N.C.

#### Western Association

President: Glen C. Turner, Colorado State College of Education; secretary: Harry E. Brakebill, San Francisco State College.

Convention: April 21-24, Empress Hotel, Victoria, B.C.

### Canadian Association of University Business Officers

President: B. F. Macaulay, University of New Brunswick; secretary-treasurer: F. J. Turner, Carleton College.

### American College Public Relations Association

President: Lynn Poole, Johns Hopkins University; executive secretary: W. Noel Johnson, 1785 Massachusetts Ave., Washington, D.C.

Convention: June 24-27, Hotel Fontenelle, Omaha, Neb.

### Association of College Unions

President: Earl E. Harper, State University of Iowa; secretary-treasurer: Edgar A. Whiting, Cornell University; editor of publication: Porter Butts, University of Wisconsin.

Convention: March 31-April 3, Hotel Utah, Salt Lake City.

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**SOLID KUMFORT**  
*Chairs That Fold*

Model 481 Chairs in the  
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Institutions choose Model 481 because they want comfortable seating that will last a lifetime! These chairs are rugged . . . with die-cast Magnesium frames and the famous Rastetter hinge and brace construction. Beautifully designed, they are ideal for use in schools, cafeterias, hospitals, hotels and clubs, where use often means abuse. They provide better seating whether they are ever folded or not.

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# classified advertising

## POSITIONS WANTED

**Assistant to President**—With 10 years in industrial sales, advertising, office management, wants administrative position; experienced on special projects. Write Box CW 335, COLLEGE AND UNIVERSITY BUSINESS.

**Bookstore Manager-Purchasing Agent**—45 years old, college graduate, several years experience; also experience with university printing and public relations department. Write CW 311 COLLEGE AND UNIVERSITY BUSINESS.

**Business Manager**—Experienced; success in managing, government construction; proven ability in financial reports, investments, supervision purchasing, bookstore, maintenance, dining hall; desires change. Write Box CW 329, COLLEGE AND UNIVERSITY BUSINESS.

**Business Officer**—Broad experience business management; State and Protestant supported institutions; desire situation challenging ability develop better business management. Write Box CW 334, COLLEGE AND UNIVERSITY BUSINESS.

**Business Manager**—Nine years experience in liberal arts college; experience in accounting, budget control and preparation, plant maintenance, purchasing and auxiliary enterprises; have family; good health; reason for change, professional advancement. Write Box CW 324, COLLEGE AND UNIVERSITY BUSINESS.

**Controller — Business Manager — Treasurer**—Successful college treasurer and business manager fourteen years, college teaching in business administration five years, experienced in accounting, budget preparation and control, financial reporting, purchasing and plant maintenance; have understanding and imagination; presently employed in college; desires change. Write Box CW 314, COLLEGE AND UNIVERSITY BUSINESS.

**Dietitian**—A.D.A. member; age 23; northwest preferred; desires position as foods director; 7 years experience, college residence halls. Write Box CW 332, COLLEGE AND UNIVERSITY BUSINESS.

**Director of Dining Halls and Dormitories**—Available September 1; over fifteen years experience in eastern and western colleges; both men and women's residence and dining halls. Write Box CW 331, COLLEGE AND UNIVERSITY BUSINESS.

**Director of Dormitories**—Experienced in college dormitory management; organization, purchasing, maintenance, budgeting. B.S. degree; excellent references. Write Box CW 327, COLLEGE AND UNIVERSITY BUSINESS.

**Engineer**—Experienced in electrical construction, maintenance, design of power and lighting systems, theatre lighting, desires position

in physical plant administration of college or university. Write Box CW 328, COLLEGE AND UNIVERSITY BUSINESS.

**Food Administrator**—Twelve years college and institutional experience; experienced in budget control and personnel development; married; 35; veteran; desires larger operation; available after May. Write Box CW 298, COLLEGE AND UNIVERSITY BUSINESS.

**Food Service Director**—M.S. degree; experienced administrator, menu planning, purchasing food and equipment, budget control, labor costs; school year. Write Box CW 330, COLLEGE AND UNIVERSITY BUSINESS.

**Food Service Director**—Successful administrator with diversified experience in large and small college food service; understand budget control, food and labor costs, purchasing and operating at a management level; excellent references available; prefers to relocate in Northern Ohio, but other locations will be considered. Write Box CW 325, COLLEGE AND UNIVERSITY BUSINESS.

**Physical Plant Director**—5 years experience as physical plant director; Ed.D. in Educational Administration; varied skilled building trades experience; 2 years college and university building operation and maintenance research; a Smith-Hughes vocational trades instructor; complete résumé on request. Write Box CW 328, COLLEGE AND UNIVERSITY BUSINESS.

**Superintendent of Buildings and Grounds**—Seeking position at college or university; experienced; college trained; presently employed in this capacity at public school system; complete résumé on request. Write Box CW 319, COLLEGE AND UNIVERSITY BUSINESS.

**Superintendent of Buildings and Grounds**—Presently employed in college desires change; seeking similar position, preferably in eastern states; experienced in budget preparation, control, purchasing and all phases of plant maintenance; complete résumé on request. Write Box CW 326, COLLEGE AND UNIVERSITY BUSINESS.

**Treasurer, Business Manager**—Desires change for greater opportunity; education—A.B., graduate and research work; experience—banking, investments, budget control, supervision of purchasing, maintenance, and auxiliary enterprises; thoroughly experienced in all phases of college business administration. Write Box CW 333, COLLEGE AND UNIVERSITY BUSINESS.

## POSITIONS OPEN

**Assistant Dietitian**—In co-educational boarding school; twenty-five miles from Philadelphia; student body of 450; salary, meals and room; ten months' job; start September 1st; opportunity for advancement. Write Box CO 219, COLLEGE AND UNIVERSITY BUSINESS.

**Assistant Director of Dining Halls**—Large midwest university; we are expanding our feeding facilities and have immediate opening for man in his 40's whose training and experience qualify him to take over managerial duties in future; good salary; send photo and full details to Box CO 220, COLLEGE AND UNIVERSITY BUSINESS.

**Assistant Purchasing Agent**—Rapidly growing south eastern state university; enrollment approximately 8,000; experience preferred, trainee will be considered; salary commensurate with experience. Write CO 203 COLLEGE AND UNIVERSITY BUSINESS.

**Assistant Superintendent of Physical Plant**—Man under 45 for newly created position; experience in all phases of plant maintenance necessary; ability to plan and supervise custodial services especially important. Send complete statement of background to Morton A. Rauh, Business Manager, ANTIOCH COLLEGE, Yellow Springs, Ohio.

**Dietitian**—Experienced dietitian to handle dining hall serving 500; position now open—4-year liberal arts college for women; excellent kitchen and dining facilities; salary open, based on training and experience; minimum \$4,000, plus room and board; other benefits. Write directly to WILSON COLLEGE, Chambersburg, Pa.

**Food Director**—Small girls' college, forty miles from New York City; experienced with knowledge of food purchasing, labor costs, budget control, interviewing and employment of food department personnel; salary commensurate with experience; include résumé of experience. Write Box CO 215, COLLEGE AND UNIVERSITY BUSINESS.

**Food Service Director**—College graduate; at least 5 years experience in food management, either commercial restaurant or institution; prefer man 23 to 40 year age bracket; permanent position with a growing concern; location in Pennsylvania; state salary expected. Write Box CO 221, COLLEGE AND UNIVERSITY BUSINESS.

**Food Service Directors**—Rapid growth of the leading quality minded college food service catering company creates a need for successful, young, male college or university food service directors; highest initial remuneration, plus rapid advancement in return for long hours of loyal work; character and personality traits more important than length of experience; relocate with consideration given to preference. Send résumé to Box CO 211, COLLEGE AND UNIVERSITY BUSINESS.

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*The rates for classified advertisements are: 20 cents a word; minimum charge, \$1. (No charge for "key" number.)*

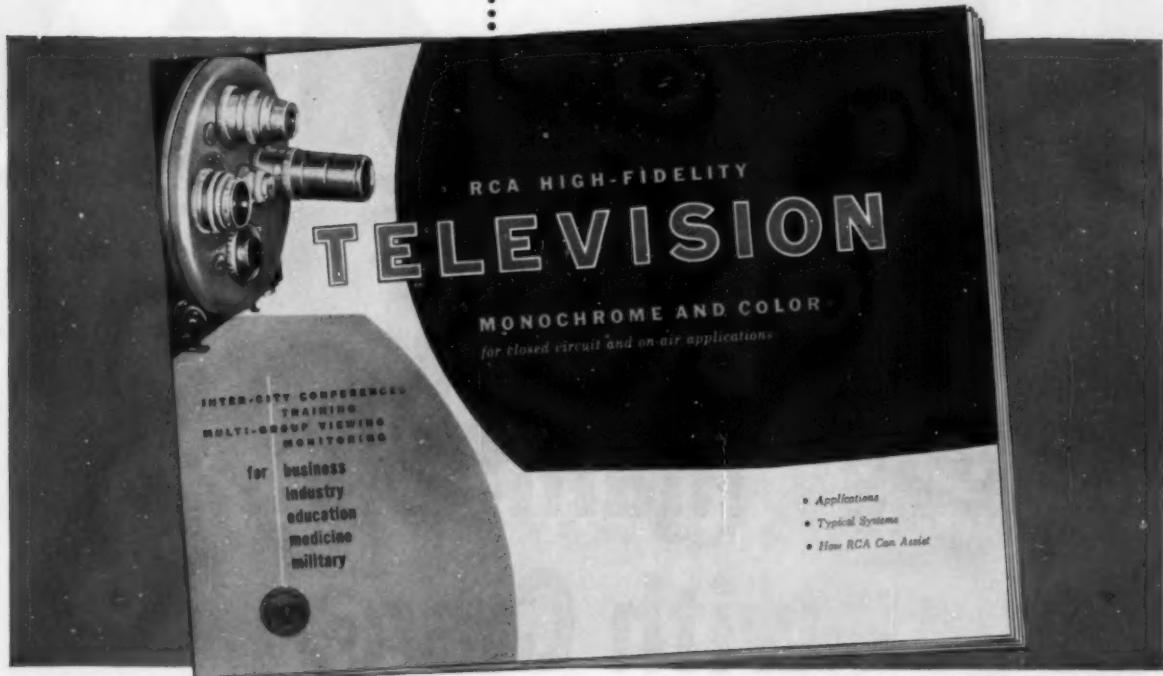
*Forms close 25th of month preceding date of issue.*

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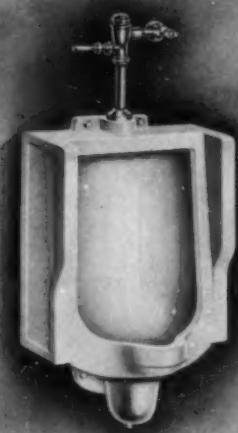
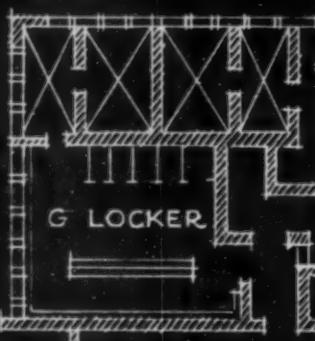
**1** *Crane Neu-Rio wall-hung urinals of vitreous china—resistant to abrasion and stain—easy to clean and keep clean—designed for easy maintenance. Crane Triumph flush valve assures trouble-free operation.*

**2** *Crane Walton closet with Triumph flush valve embodies latest principles of sanitation. Siphon jet type. Quiet and efficient operation. Highest quality vitreous china. Made for long life and low maintenance cost.*

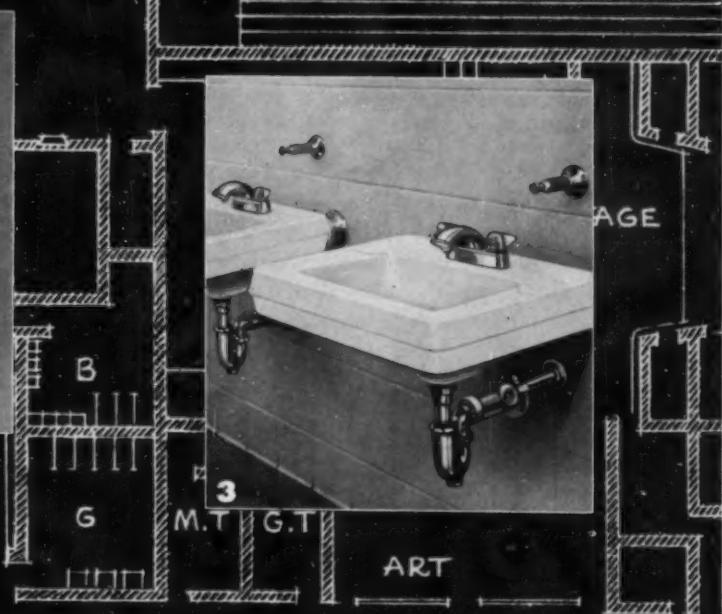
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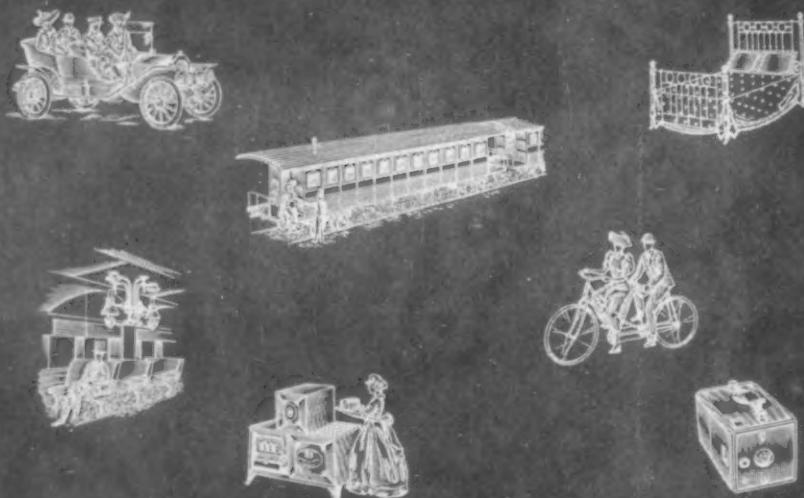
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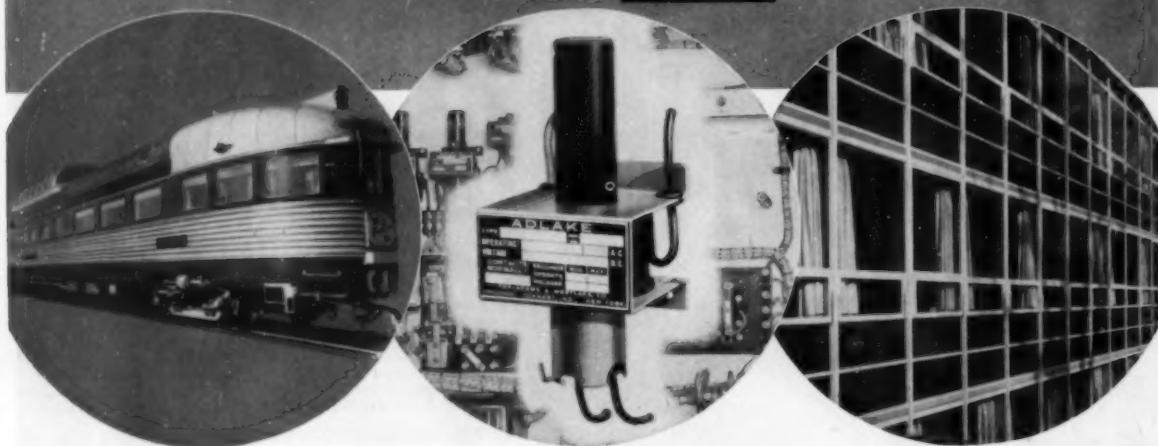
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# WHAT'S NEW

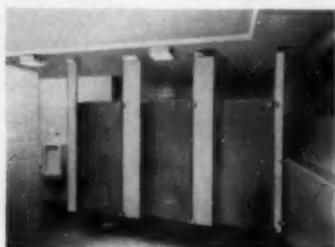
March 1957

Edited by Bessie Covert

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 112. Circle the key numbers on the card which correspond with the numbers at the close of each description item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

## Toilet Compartments in Vitre-Steel

Henry Weis Toilet Compartments are now available in Vitre-Steel, the trade



name of the application of porcelain enamel on steel. The compartments are available in both ceiling hung and floor braced styles. Vitre-Steel withstands everyday usage and is resistant to acids, cleaning compounds and even defacement, making it an ideal material for toilet compartments. Henry Weis Mfg. Co., Inc., Elkhart, Ind.

For more details circle #675 on mailing card.

## Intercom Control Center Of Medium Size

The advantages of the standard Tele-talk intercommunication system are combined with those of the large school consoles in the new compact, medium-sized control center, the Consolette. Providing intercommunication, music distribution and paging for from one to 48 speaker locations, the Consolette is a dual channel system. It is sturdily constructed and permits voice transmission and paging, music distribution, alarms or general announcements to be carried on at the same time. One station can thus be called without interrupting transmission of a program to all other stations. A snap-on emergency switch for special calls to all stations is also part of this medium-priced unit.

The Consolette has a built-in AM-FM radio tuner, inputs for a tape recorder, record player and microphone, three position telephone-type selector keys, an overload indicator to prevent distortion, separate incoming and outgoing volume controls, and a three-position program selector switch for phonograph, radio or tape recorder. The Consolette is available in units ranging from 12 to 48 station capacity. Webster Electric Co., 1900 Clark, Racine, Wis.

For more details circle #676 on mailing card.

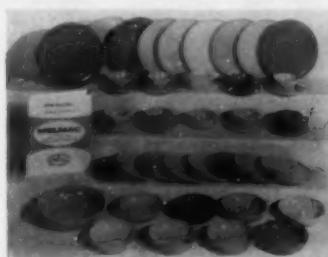
## Floor Maintainer with Increased Power

The new Clarke FM-11 floor maintainer employs a specially designed  $\frac{1}{3}$  h.p. motor which provides 30 per cent more power with no increase in weight or size. The machine has an 11 inch brush which scrubs, waxes, polishes, steel wool, buffs and shampoos. The high-power motor has lifetime lubricated ball bearings and high starting torque. An adjustable handle locks in any position on a 90 degree arc and flip-up wheels automatically retract when the weight of the maintainer is shifted from wheels to brush. Clarke Sanding Machine Co., Muskegon, Mich.

For more details circle #677 on mailing card.

## Melmac Dinnerware in Decorated or Plain Patterns

Melmac, the melamine plastic molding compound manufactured by the Ameri-



can Cyanamid Company, is used in the molding of the new Stetson line of plastic dinnerware. Stetson China, manufacturer of handpainted pottery dinnerware, has recently added the line of melamine plastic dinnerware which is offered in decorated and undecorated patterns, solid colors, color on color and in special modern and traditional designs created by Anselo.

The new line is offered in open stock and service sets. It can be washed in hot water with any soap or detergent or in dishwashing machines without warping or fading and does not show contact marks from other dinnerware. Stetson Melmac ware resists cracking, chipping and breakage, even when dropped, stacks easily and quietly, and is odorless and tasteless. Colors, patterns and designs are carried through the material to prevent wear and fading. Stetson China Co., Merchandise Mart, Chicago 54.

For more details circle #678 on mailing card.

## Packless Valves for Ventilating Controls

Duo-seal packless valves designed for convectors, unit ventilators and air conditioners, and radiators, employs a bronze bellows as a primary seal and a spring-loaded neoprene "O" ring as a secondary seal instead of the conventional packing. The bronze bellows eliminates leakage and requires no maintenance.

Should the packless bellows become damaged, the neoprene ring at its base effectively prevents steam or water leakage and vacuum loss. The top of the valve can be removed to replace the bellows without draining the water system, shutting off steam or removing the valve from the line. The life of the valve is from 10 to 15 years, according to the manufacturer. The Powers Regulator Co., 3434 Oakton St., Skokie, Ill.

For more details circle #679 on mailing card.

## Speed, Quiet and Color in Improved Calculating Machine

The new Monroe "800" calculating machine is designed for speed, quiet operation and appearance to harmonize with modern decor. Keys are colored according to function, which simplifies and speeds operation. The higher cycling mechanism in the new model provides fast, silent operation.

Built for rugged use and reliability, the new "800" is mounted on rollers for greater mobility. It offers single or double spacing and has a hinged cover to facilitate changing of ribbon and paper. When the total key is depressed, the tape glides to the tear-off position. The tear-off knife is transparent, leaving figures visible at all times. The machine



has all of the features of the earlier series "400" and is finished in attractive colors. Monroe Calculating Machine Co., Inc., Orange, N.J.

For more details circle #680 on mailing card.

(Continued on page 88)

## What's New . . .

### Redesigned Table and Bench Has Functional Simplicity

Rested by industrial designers Lip-  
pinott and Margulies, the new 1957



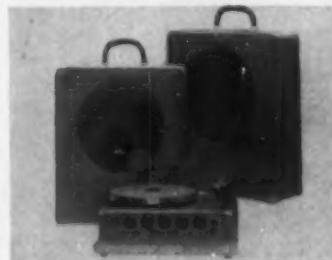
Sico portable Model B-Y folding table and bench combination is attractive and practical; one of four in the 1957 line. It is described as a cafeteria unit with a capacity of 16 adults or 20 children at the 12-foot model. A 10-foot model is also available. The top is 30 inches wide and seat heights are 13, 15 or 17 inches. Contemporary school colors used in all 1957 models include Platinum Walnut, Limed Rift Oak, Rotary Birch, Tan and Green Linen.

Improvements in the model include a honeycomb core bonded to Masonite on both sides and edged with Prestwood for the table tops, making them impervious to school abuse. Modification of the legs in structure and appearance improve their dual use as supports and as handles for folding and unfolding. The unit is easily and noiselessly folded and unfolded with minimum effort and maximum safety. The 14-gauge structural steel framework gives rigidity and durability and four-inch rubber casters assure easy mobility. The 1900 stationary model in six, seven or eight-foot lengths has all the new features and is designed to fit fixed seating needs. Sico Mfg. Co., Inc., 5202 Eden Ave. S., Minneapolis 24, Minn.

For more details circle #681 on mailing card.

### Portable Sound System Fills Any School Need

The 1957 Califone Commander Phonograph, Model 40V-7, meets the requirements for a powerful sound system for



use in gymnasiums, recreation areas and playgrounds. A high fidelity amplifier and two heavy duty speakers make up a single unit with the amplifier to complete

the Califone portable sound system.

The Commander phonograph employs all the construction advantages of other Califone models. Separate tone controls on microphone input, and separate controls for treble and bass on phonograph with mixer control for two microphones and phonograph make possible perfect balance of voice and music. For easy identification, controls for microphone No. 1 are red, for microphone No. 2, black and those for the phonograph are blue. Two additional speakers in a matching case are optional. Califone Corp., 1041 Sycamore Ave., Hollywood 38, Calif.

For more details circle #682 on mailing card.

### Vinyl Foam Cushioning for Classroom Seating

A tough, embossed vinyl surface is integrated with foamed vinyl in forming a new material for the seats and backs of classroom seating. The flame resistant vinyl foam cushioning is fabricated from B. F. Goodrich Chemical Company's Geon 121 paste resin. It withstands moisture, mildew and rough treatment,



has high tear strength and dimensional stability. The new cushioning material is offered in a wide variety of colors. Brown Rubber Co., Lafayette, Ind.

For more details circle #683 on mailing card.

### Electronic Stencil Cutter Reproduces Art Work

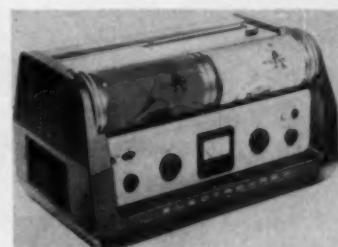
Stencils or plates can be made from practically any graphic material with the new Electro-Rex Electronic Stencil Cutter. Almost anything can be printed without the assistance of artist or printer with the new device, according to the report. Stencils of drawings, office forms, typed matter, original layouts, clippings or screened photographs are quickly produced, ready for reproduction.

The optical scanning system in the Electro-Rex process picks up any images placed on the scanning side of the drum. These images are converted to high frequency currents and through electronic amplification are transferred to a cutting stylus on the reproduction side of the drum. An exact duplicate of the original is thus obtained on a plastic stencil or a

(Continued on page 90)

plate, ready for immediate duplication of thousands of copies of high quality.

Scanning definition from 125 to 750 lines per inch and sensitivity variable



over the entire tone scale from black to white assure high quality reproductions. Electro-Rex stencils may be used with any stencil duplicator, it is said, but best results are obtained on a Rex-Rotary twin-cylinder duplicating machine with its special, heavy duty, fast-drying ink. Rex-Rotary Distributing Corp., 387 Fourth Ave., New York 16.

For more details circle #684 on mailing card.

### "Multi-Meal" Containers Assure Hot Food Service

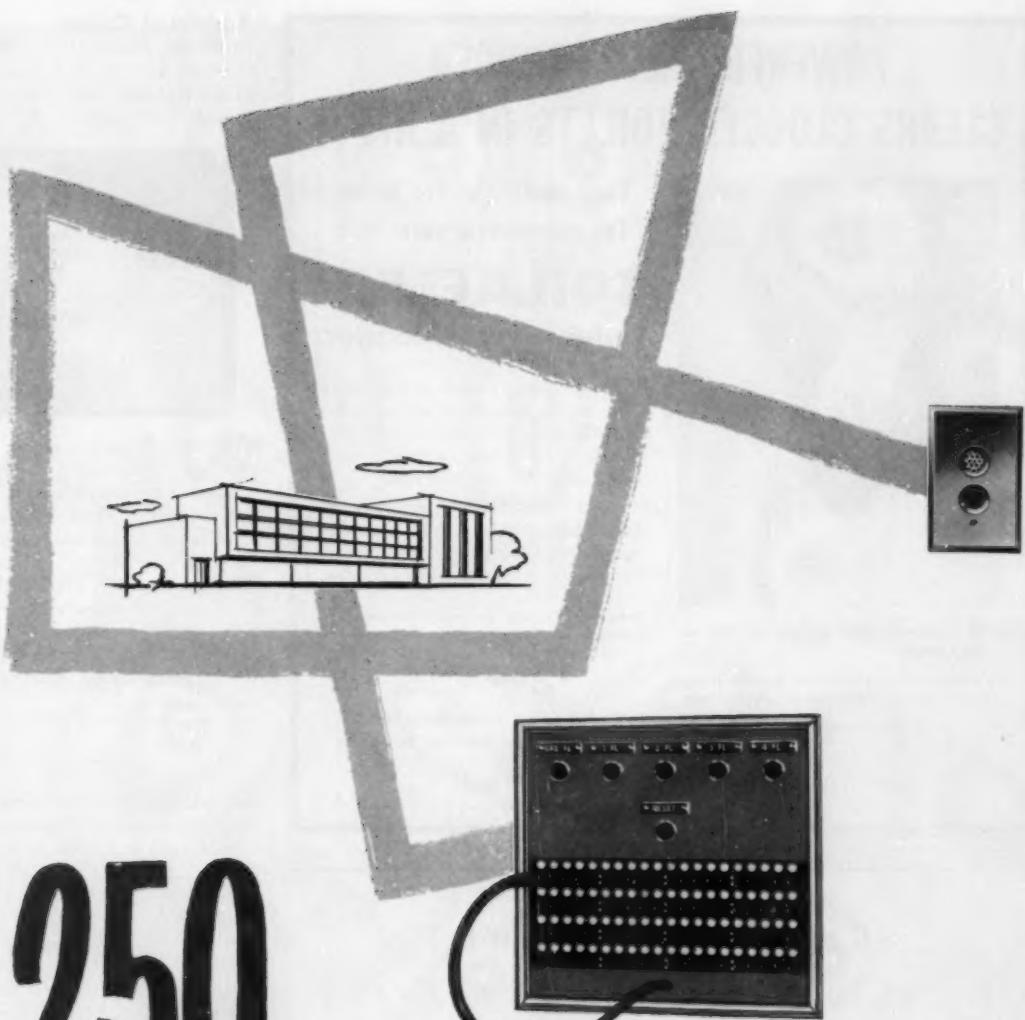
The new Mealpack Models 8-MM and 8-MM-E "Multi-Meal" Containers recently introduced are designed to simplify the centralized vacuum sealing, and the decentralized serving of hot main courses of food without re-heating. Eight partitioned Pyrex Brand dishes, each containing a full main course of food, fit on top of each other into a double-walled insulated stainless steel base. A similarly constructed stainless steel cover fits over the dishes and is clamped to the base, providing a compact, easily handled eight-meal unit.

Operating on a vacuum principle, the 8-MM model is designed to keep meals hot for from one to two hours, and the 8-MM-E, electrically heated, can maintain temperature indefinitely through a built-in thermostatic control. When removed from the container, each dish is placed in the new Mealpack durable Model CTS Serving Tray where it locks against turning or side movement. Other



courses for each meal, as well as cutlery, seasoning, napkins and other items, are recessed into each tray. Mealpack Corp., Evanston, Ill.

For more details circle #685 on mailing card.



# 250 ROOMS IN ONE SQUARE FOOT

That's the kind of compactness you receive when you install an Edwards Return Call System! It's the perfect solution for the problem of dormitory and classroom communications. What's more, only Edwards provides a system so compact...so inexpensive.

The Edwards Return Call System can provide up to 1,000 stations in the smallest possible area. An example may be readily seen in a 250 station system. Normally this would call for a control panel a minimum of 51" x 41". Edwards puts up to 1000 stations on a panel that measures only 12" x 15". This space saving advantage is made possible by the

use of germanium diodes and miniature circuits.

You save money, too, when you install an Edwards Return Call System because in many installations it eliminates the need for expensive telephone switchboards. In addition, Edwards Return Call Systems require merely a fraction of the wiring needed by other systems.

Get the complete story on how you can save money with the Edwards Return Call System. See your Electrical Contractor or write Dept. CU-3, Edwards Company, Inc., Norwalk, Connecticut. (In Canada: Edwards of Canada, Ltd., Owen Sound, Ontario.)

*Specialists in signaling since 1872*

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## What's New . . .

### POWERFUL NEW PLUNGER CLEAR CLOGGED TOILETS IN A JIFFY!



Clear messy, stuffed toilets  
Cut maintenance costs with

#### 'TOILAFLEX' Toilet ALL-ANGLE Plunger

Ordinary plungers don't seat properly. They permit compressed air and water to splash back. Thus you not only have a mess, but you lose the very pressure you need to clear the obstruction.

With "TOILAFLEX", expressly designed for toilets, no air or water can escape. The full pressure plows through the clogging mass and swishes it down.

Order a "TOILAFLEX" for your own home too.  
Positive insurance against stuffed toilet.

**\$2.65** Fully  
Guaranteed

Order from your Supplier of  
Hardware or Janitor Supplies

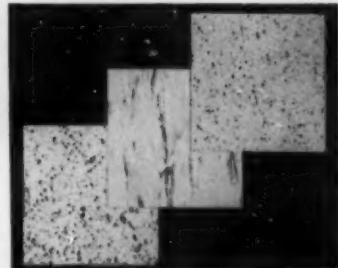
- Accordion-action design to flex at any angle
- Double-size cup blasts double pressure, aimed directly at obstruction
- Tapered suction-grooved tail gives air-tight fit

THE STEVENS-BURT CO., NEW BRUNSWICK, N. J.

A Division of The Water Master Company

#### Additional Colors In Floor Tile

Three new numbers have been added to the Azphlex vinylized tile line. They include Canyon Pink, P-721, a terrazzo



tone design with salmon pink background; Fresco Green, P-722, a terrazzo tone with a green background, and Horizon Gray, P-736, a marble tone with light blue background with blue and silver-gray striations. All three are available in nine by nine inch sizes and 3/32 inch thickness with Horizon Gray also available in 1/8 and 3/16 inch thicknesses. Azrock Products Div., Uvalde Rock Asphalt Co., Box 531, San Antonio, Texas.

For more details circle #685 on mailing card.

#### Adjustable Posture Chairs for Commercial Classrooms

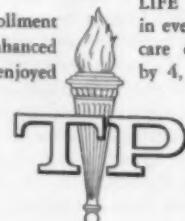
Harcos of Garrett has introduced a new line of adjustable posture chairs and stools to be used with their commercial room stands and tables. The chairs are comfortable and practical for any size student through the use of a three inch adjustment range in seat height and a sturdy plywood back which pivots and adjusts up and down.

The plywood seat is saddle shaped and swivels, or is stationary if desired. The one-inch by 16 gauge tubular steel



base has a 21-inch base spread for overall balance. Colors available include Coral Tan, Mist Green and Platinum Grey. Stools with similar construction advantages are available for laboratories, training shops and other uses. Hardware Engineering Co., Inc., 802 E. King St., Garrett, Ind.

For more details circle #487 on mailing card.  
(Continued on page 92)



Write today for descriptive brochure.

### THE TUITION PLAN, INC.

347 FIFTH AVENUE, NEW YORK 16, N. Y.



## The Sweetheart of Sigma Phi

Sigma for Style and Phi for Function. (For brevity's sake, we left off the last letter—Delta for Durability.) Fraternities are Greek to us, but we know our furniture. New Contract-American, for instance, is head of its class. The case pieces (6027 Desk and 6024 Chest) have drawer fronts, sides and tops of fabulous Fibresin, the mar-resistant panelling that won't burn, can't stain.

Being solid plastic, beautifully wood-grained, there are no laminations to separate or become unsightly. Black tubular steel frames, smartly contemporary, are Bonderized for protection against rusting, chipping, cracking and peeling. Required Reading: Troy's special *Contract-American folder and price list*. Write for your copy today, or visit our contract showrooms.

**THE TROY SUNSHADE COMPANY**

*makers of fine outdoor furniture and umbrellas*

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showrooms: ONE PARK AVENUE, NEW YORK • STUART-TROY, 31 FRONT ST., SAN FRANCISCO • 666 LAKE SHORE DRIVE, CHICAGO • FACTORY, TROY, OHIO

## What's New . . .



### The Insured TUITION PAYMENT PLAN

This is the prepayment plan that brings the parent low-cost life and disability insurance protection, plus a monthly budget provision that extends to the final month of his educational expenses four or more years hence. Used today in many of the best-known colleges and preparatory schools, it has proven most valuable to administrative officers by providing them with a dignified, parent-approved method which:

- 1** alerts parents to their financial obligation when the student is accepted for admission;
- 2** offers parents a convenient and logical plan for meeting that obligation;
- 3** assures the parent (and thus the college) that he will have adequate funds with which to meet his college obligations in full and on time;
- 4** preserves the traditional relationship between the college and the parent—debt-free and direct.

*Individualized descriptive literature for mailing to the parents of incoming students is furnished for each preparatory school, college or university.*

#### WRITE TODAY FOR DETAILS

We should like to know more about the Insured Tuition Payment Plan as it would apply to the students at:

Name of School or College \_\_\_\_\_

Address \_\_\_\_\_  
Please contact: \_\_\_\_\_

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Title \_\_\_\_\_

**RICHARD C. KNIGHT**  
**INSURED TUITION PAYMENT PLAN**  
112 WATER STREET  
BOSTON 9, MASSACHUSETTS

#### Tablet Arm Chair for Upper Grade Students

A tablet arm chair has been especially designed by Brunswick with upper ele-



mentary, secondary school children and college students in mind. The unit, which has an adjustable tablet arm, is available in a 15 or 17 inch size to seat any student comfortably.

The chair features compact design to allow wider aisles in the classroom yet has an increased leg spread from front to rear for maximum balance. A side book rack welded to the frame provides ample storage space for books and the tablet arm can easily be disassembled from the support for storage. Brunswick-Balke-Collender Co., 623 S. Wabash, Chicago 5.

For more details circle #688 on mailing card.

#### Microfilm Reader for Legal-Size Documents

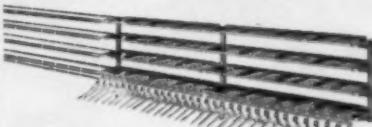
The new "Examiner" microfilm reader is a large desk-top model designed for easy viewing or quick photocopying of microfilmed legal-size documents. Large



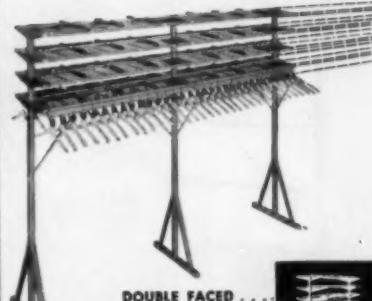
prints of the microfilmed material are easily made simply by direct projection of the film image onto photocopying paper. The viewing and printing screen is 14 by 14 inches in size. By use of interchangeable lenses it may be used to provide magnifications of 15 and 20 in one group, and 24, 30 and 42 magnifications in the other. It is designed for general use with aperture cards or jacket cards. The unit is 30 inches high and occupies 17 by 17 inches of desk or table space. Filmsort Div., Dexter Folder Co., 50 S. Pearl St., Pearl River, N.Y.

For more details circle #689 on mailing card.  
(Continued on page 94)

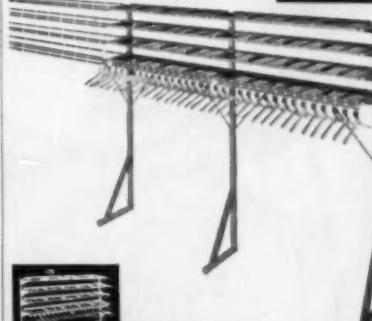
**checker®**  
COAT and HAT RACKS



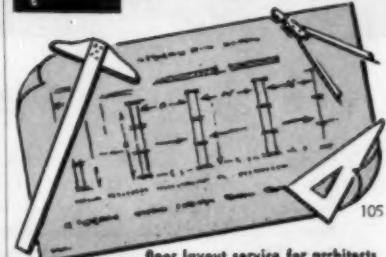
**WALL RACKS**  
Basic 2' 2", 3' 2", 4' 2" and 5' 2" units mount directly on wall. Interlocking add-on sections make racks of longer lengths and greater capacity.



**DOUBLE FACED . . .**  
These standard cloakroom racks (with or without checks) hold 8 coats and hats per foot of length. Also available in 4' 2" and 5' 2" portable racks—with check braces and large casters.



**SINGLE FACE**  
Stationary or portable racks fit close against wall. Sections snap-lock together to make rigid assembly that will not sag, wobble or creak.



**Floor layout service for architects**  
Let our cloakroom and checkroom specialists suggest equipment requirements and efficient layout. Just send outline of available space, capacity desired and nature of load. No obligations, of course.

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HARD is the important new name in metal dormitory furniture. Time honored as craftsmen of LifeLong Hospital Furniture, Hard now offers the same service-proven quality in dormitory furniture that is specifically designed for educational and institutional use.

**HARD METAL FURNITURE IS AVAILABLE ON CONTRACT TO MEMBERS OF THE EDUCATIONAL AND INSTITUTIONAL CO-OPERATIVE SERVICE INC.**  
1461 Franklin Avenue  
Garden City, L.I., New York



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**HARD MANUFACTURING COMPANY** 730 FIFTH AVE., NEW YORK CITY  
Room 601, FIRST NATIONAL BANK BLDG.,  
EL PASO, TEXAS  
117 TONAWANDA STREET, BUFFALO, N.Y. Executive Offices and Plant

## What's New . . .

### Urine Test Tape from Vending Machine

A vending machine has been designed to make a new urine sugar test tape



encourage the public to determine privately and at their convenience if glucose is present in the urine. Clinical Development Laboratories, 2600 S. Walnut St., Springfield, Ill.

For more details circle #690 on mailing card.

### Ceramic Wall Tile in Large Sizes

American-Olean Tile has introduced an 8½ by 4½ inch glazed wall tile to its line of ceramic tile. The new unit may be set horizontally or vertically and used with other standard wall tile sizes for a variety of effects. The larger size and self-spacing features lower installation time and costs. American-Olean Tile Co., 1000 Cannon, Lansdale, Pa.

For more details circle #691 on mailing card.

readily available to university personnel, students and visitors. The initial low cost of the unit not only assures a profitable venture for the institution, as each package is vended for twenty-five cents, but also provides an inexpensive diabetes check for the public.

The machine dispenses a complete package including the hermetically sealed Sugar-Chek Test and a comprehensive diabetes information folder. Complete instructions on how to use the Sugar-Chek and how to interpret the results is given on the outside of the package. The Sugar-Chek is a practical device to

### Floor Machine For Small Area Jobs

The Multi-Clean Lite 12 Floor Machine was designed to maintain floor areas up to 2,000 feet. The 12-inch machine weighs only 35 pounds, making it easy to handle and to move from place to place. Its low height makes it ideal for getting under furniture and room fixtures. The Lite 12 has all the construction advantages of larger Multi-Clean floor machines. Multi-Clean Products, Inc., 2277 Ford Pkwy., St. Paul 1, Minn.

For more details circle #692 on mailing card.

(Continued on page 96)

**durable  
AND  
Smart**

**FURNITURE**

**Wall-Saving  
Easy Chair**

No. 610

Also available, a wide assortment of chairs and tables for dormitory, social room, dining room and other uses.

See your dealer or write us for our distributor's name.

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CHAIR COMPANY  
MANUFACTURERS**

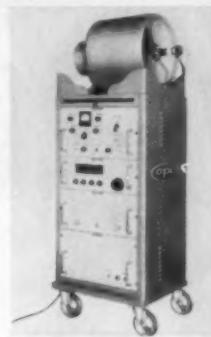
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PERMANENT DISPLAYS: Chicago — Space 1650, Merchandise Mart  
New York — Decorative Arts Center, 305 East 63rd St. (9th Floor)  
Miami — 3900 Biscayne Boulevard • Boston — 92 Newbury Street

### TV Projection System for Wall-Sized Pictures

Designed for easy viewing of closed-circuit, educational and special events by large groups in classrooms or auditoriums, the GPL Portable Television Projection System throws large, brilliant, pictures on a wall-sized screen.

Model PB-611A with an improved optical system provides sharp, clear pictures approximately four times as bright as earlier GPL models. Pictures can be projected by the new model on any suit-



able screen from six feet wide up to 16 feet or more. The unit has been simplified for easier operation and control. General Precision Laboratory Inc., Pleasantville, N.Y.

For more details circle #693 on mailing card.

## Correct Rug & Carpet CARE

Wool fibers need Tinolan Process

STOP DESTRUCTIVE USE OF  
Scrubbing—Soaps—Detergents

Tinolan process does not mat the pile but restores rugs and carpets previously mistreated.

**COSTS LESS** than scrubbing . . . is easier . . . without removing carpets or rugs . . . no expensive heavy equipment . . . no hard labor.

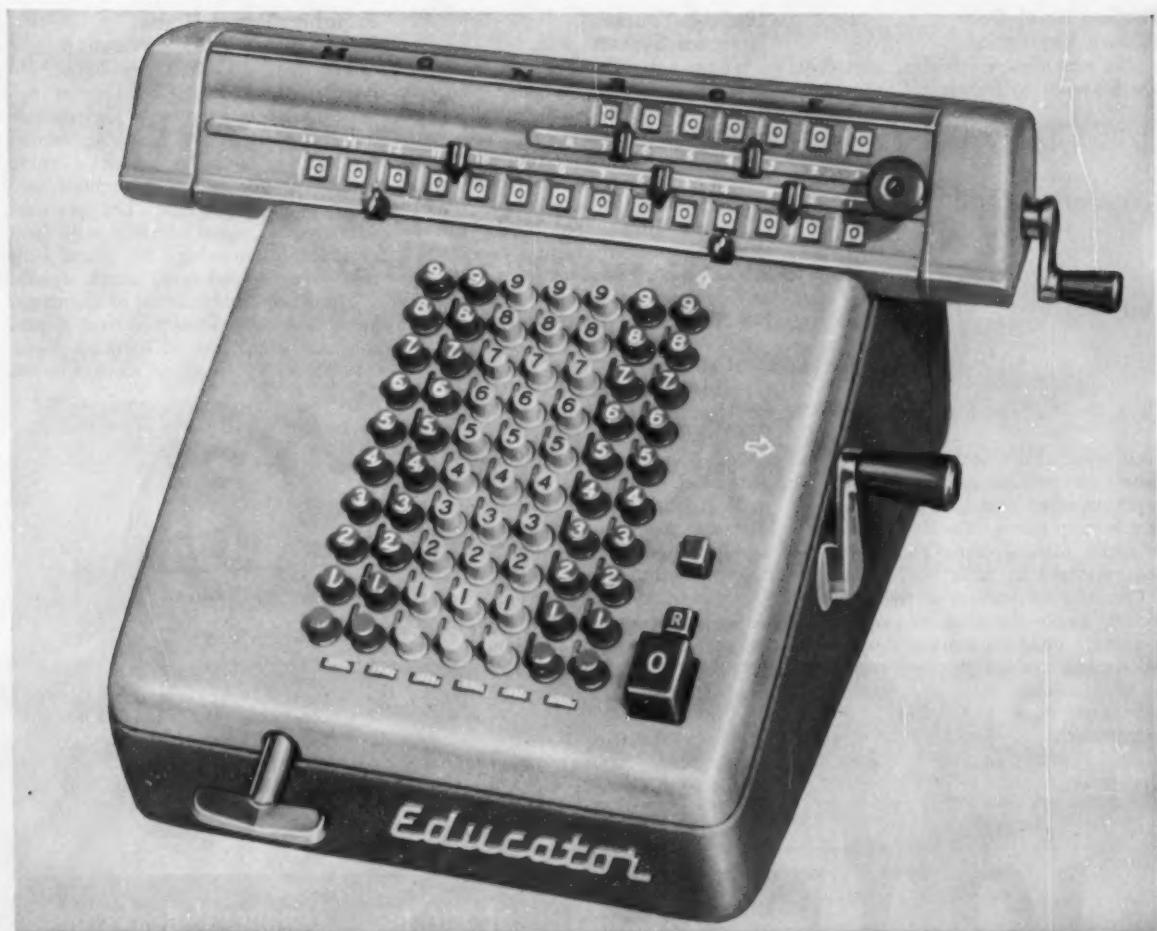
**CLEANS & FLUFFS** pile fibers . . . no felting . . . maintains new condition . . . and mothproofs too at no extra cost. Safe on twists.

**DEVELOPED** to restore and condition priceless wool rugs and tapestries in one of the country's leading Museums.

Tinolan Process is now used in many leading Colleges and Universities. Write for full information.

**TINOLAN**

The Tinolan Company of America, Inc., Wallingford Rd., Media, Pa.



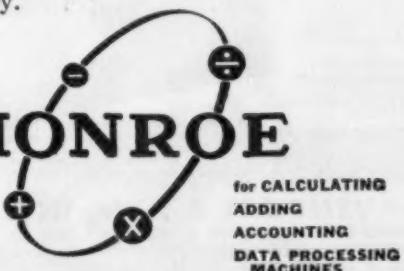
## **College Students GAIN MORE IN REASONING ABILITY**

With the Monroe Educator to handle basic computations mechanically, students in courses involving mathematics have their minds free for thought processes . . . develop greater reasoning power in their studies.

Because of its low cost, portability and simplicity of operation, the new Monroe Educator is the ideal calculator for wide general use in colleges.

For information write Monroe Calculating Machine Company, Inc. General Offices: Orange, New Jersey. Offices throughout the world.

**See the MAN from MONROE**



## What's New . . .

### Folding Steel Door Allows Ventilation

The new Fenestra folding steel doors are louvered to permit full ventilation



even when doors are closed. Ideal for closets and storage areas, the doors are easily installed and can be painted to match room colors. The doors fold back to jambs for full access to the storage area, yet take up little floor space.

Construction features of the new line include ample clearance, non-sagging or warping, quiet operation, maximum service life, no jumping off track and no maintenance. The doors are available in six feet eight inches and eight feet heights, in widths to meet most requirements. Fenestra Inc., 3255 Griffin St., Detroit 11, Mich.

For more details circle #694 on mailing card.

### "Build-it-Yourself" Intercom System

Knight-Kit Two Station Intercom System serves as a valuable electronic teaching aid. The easy-to-install system consists of a master station, remote station and a 50-foot connecting cable. Only the master station need be connected to a power source of 110-120 volts AC or DC while the remote station can be located in any convenient spot. The kit is also supplied with all tubes and parts and instructions. Allied Radio Corp., 100 N. Western Ave., Chicago 80.

For more details circle #695 on mailing card.

### Flexible Armofoam for Upholstered Seating

A new cushion foam for padding under upholstery for folding chairs, auditorium seating and similar uses, as well as padding for gymnasiums, is offered in Armofoam. A flexible polyurethane foam, all raw materials are produced within the United States.

Armofoam is odorless and flame-resistant, can be washed or dry cleaned, and resists solvents, abrasion, vermin, sliding and fabric creep. It is extremely durable with strength increased by aging, and is the result of more than two years of exhaustive research and laboratory tests. Armour and Company, Alliance, Ohio.

For more details circle #696 on mailing card.

(Continued on page 100)

### Portable Signal Horns for Auxiliary Attack Warning

The new Falcon horns have been listed by the Federal Civil Defense Administration as approveable for purchase under the agency's "matching funds" program as auxiliary attack warning equipment for schools, hospitals and other public buildings. The portable, self-powered signal devices will help avoid confusion where fire alarm bells have been utilized as air attack signals.

The Falcon units consist of aluminum horns and valve assemblies and disposable one-pound cans of harmless Freon Gas. Model S-11 produces more than 300



two-second blasts of 120 decibel intensity and Model BB-44, approximately 200 two-second signals of 125 decibels. Falcon Alarm Co., Inc., Summit, N.J.

For more details circle #697 on mailing card.

# 100

DIFFERENT SIZES, STYLES  
OF BULLETIN BOARDS AND  
CHANGEABLE LETTER BOARDS

BY DAV-SON

A Dav-Son board for every job. Changeable letter directory and announcement boards, black boards, menu boards, others. Sturdily constructed, every Dav-Son board is built to last, with quality built-in for years of service.

Dav-Son Changeable Letter Directories for Lobby, Office, Outdoor Use.

- Wide Variety of Styles and Sizes
- Indoor and Outdoor
- Hardwood or Metal Frames
- Highest Quality Felt
- Absolutely Warpproof
- Also Available with 5' 8" Standards

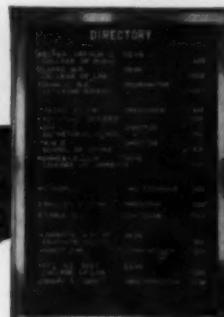
Dav-Son Genuine Self-Sealing Cork Bulletin Boards

- Indoor and Outdoor Style
- Hardwood or Metal Frames
- With or Without Locking Glass
- Doors
- World's Largest Selection

DEALER INQUIRIES INVITED  
If Your Dealer Can't Supply,  
Order Direct

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311 N. DESPLAINES STREET, CHICAGO 6, ILLINOIS, DEPT. CB  
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Dav-Son Changeable Name Plates  
Black card with white lettering under  
beveled plexiglass shield. Triangular  
wood base in choice of Walnut, Oak,  
Mahogany, Blonde or Steel Gray.  
10 1/4" x 23 1/4".

...of the many teachers' desks\*  
only One stands out.....

HASKELL  
OF PITTSBURGH



Designed to balance  
your school budget!

It takes Haskell budget know-how to give you more value for every school dollar you invest in teachers' desks. More built-in quality, more comfort, more beauty including colors—all pays off! Happier teachers! Better teaching!

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A GOOD NAME  
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**FORT HOWARD'S**

**Palmer TISSUE**

**so gentle and absorbent . . .  
another good influence**

Soft, absorbent, pure white Palmer Tissue pleases all your employees, customers or visitors. They appreciate Palmer's gentle absorbency . . . and your attention to their comfort. Result: good-will for you.

That's because Palmer Tissue—the finest 1000 sheet roll obtainable for institutions and industry—provides the quality and gentle absorbency of

home tissues . . . the quality that people want.

It will pay you to consider Palmer for your tissue needs. Your requirements can be met better by Palmer . . . or another of Fort Howard's 19 grades and folds of tissue. For more information and samples, call your Fort Howard distributor or write Fort Howard Paper Company, Green Bay, Wisconsin.



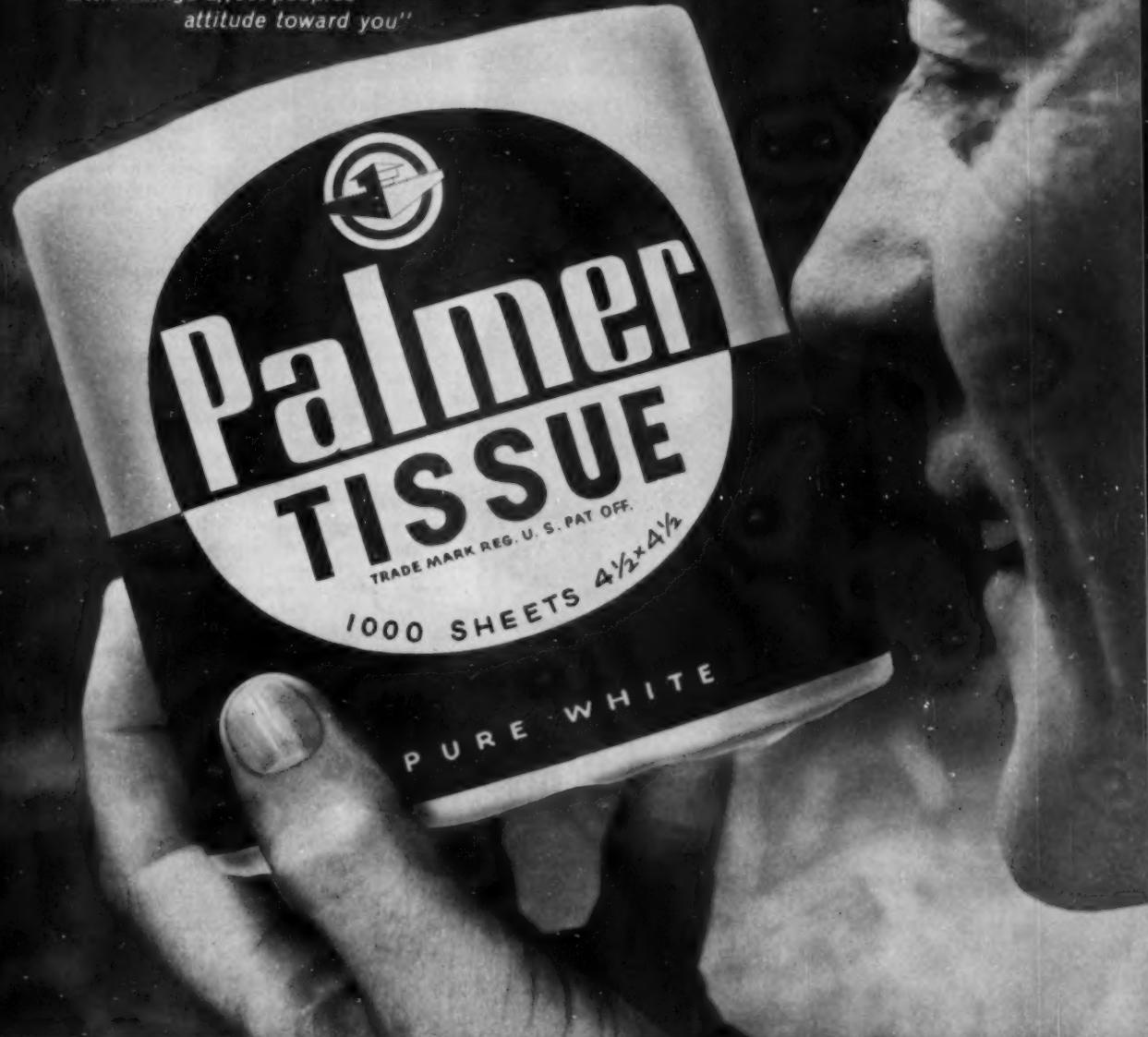
**Fort Howard Paper Company**

*Green Bay, Wisconsin*

*America's most complete line of paper towels, tissues and napkins*

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*"Little things affect peoples'  
attitude toward you"*





Picture of John Wise from AMERICAN HERITAGE

## The old lady gave him what for



AN OLD LADY living near Henderson, N. Y. in 1859 was shocked at the way the four men had arrived—and said so. Such sensible-looking men in such an outlandish vehicle!

But John Wise and his crew, perched up in a tree, were far too happy to listen. Caught by a storm, their aerial balloon had almost plunged beneath the angry waves of Lake Ontario. Then, after bouncing ashore, they had crashed wildly through a mile of tree-tops before stopping in one.

Now, his poise regained, Wise stood up to proclaim: "Thus ends the greatest balloon voyage ever made." He had come 1200 miles from St. Louis in 19 hours, setting a record unbroken for 60 years.

He had also proved his long-held theory of an earth-circling, west-east air current—and that was far more important to him. For Wise was no carnival balloonist. He was a pioneer scientist of the air, a man whose inquiring mind and courageous spirit helped start the vast forward march of American aviation.

In America's ability to produce such men as John Wise lies the secret of her real wealth. For it is a wealth of human ability that makes our country so strong. And it is this same wealth that makes her Savings Bonds so safe.

168 million Americans back U. S. Savings Bonds—back them with the best guarantee you could possibly have. Your principal guaranteed safe to any amount—your interest guaranteed sure—by the greatest nation on earth. If you want *real* security, buy U. S. Savings Bonds at your bank or through the Payroll Savings Plan where you work. And hold on to them.

PART OF EVERY AMERICAN'S SAVINGS  
BELONGS IN U. S. SAVINGS BONDS



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# BETTER Light FOR COLLEGE LABS

## New Trend In Research Buildings Involves Window Walls of Coolite Wire Glass

The importance of good daylighting in colleges and universities is reflected in these bright walls of Coolite, Heat Absorbing and Glare Reducing Glass—here illustrated in the new Borden Company laboratory. Interiors are flooded with natural illumination free of the harmful effects of "raw" sunlight that cause optic and physical discomfort.

4800 sq. ft. of Coolite makes these new laboratories appear larger, brighter, more comfortable . . . with plenty of conditioned light for the most exacting scientific work.

Yet, the proven ability of Coolite to absorb unwanted solar heat helps keep interiors cooler. Occupants see better, feel better, work better and more accurately in areas glazed with Coolite.

Coolite Wire Glass protects against shatter damage, resulting from fires. This approved Fire Retardant No. 32 tends to bottle up and thus prevent the spread of flames. And the Coolite wire glass adds beauty to the exterior—the clean, blue hue harmonizes with the crisp, modern design . . . its benefits minimize need for unsightly painted screens or blinds.

**For maximum comfort and protection specify Mississippi Coolite Heat Absorbing and Glare Reduced Wire Glass. Available through leading distributors of quality glass. Mississippi offers a wide variety of translucent, light diffusing glass patterns for every glazing requirement.**

Architects: Skidmore, Owings & Merrill  
Consulting Engineer: Harry H. Bond  
General Contractor: William F. Letz, Inc.  
Glass and Glazing by McKeon, Inc.



Write today for free catalog. Address Dept. 27.

MISSISSIPPI *Glass* COMPANY

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SAINT LOUIS 7, MO.  
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WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS



Samples on request.



## What's New . . .

### Announcing!

America's Most Modern  
... Most Efficient

### Automatic Hand and Hair Dryer



**NEW!**  
Sani-Dri No. 12

### Never Before So Many Exclusive Features!

**Decorator Styling!**—Designed by E. Burton Benjamin & Associates to blend perfectly with today's new fixtures . . . modernize old washrooms.

**Faster Drying!**—Increased air flow with improved heating element gives much greater drying efficiency.

**Quieter . . . Safer!**—Dynamically balanced motor and blower operate smoother and quieter . . . insulated plastic push bar completely protects user.

**Less Maintenance Required!**—Rugged Airflex timer gives longer service without repairs. Thermostatic motor protection eliminates fuse replacement.

**More Economical, Too!**—Revolutionary new heating element delivers more warm air with 33-1/3% less current consumption.

### GUARANTEED 2 FULL YEARS

**Write Today for  
New Brochure**  
... SHOWS THE  
COMPLETE LINE

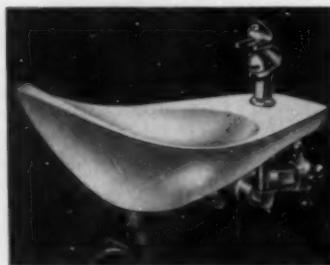


Dependable Since 1897

**THE CHICAGO HARDWARE FOUNDRY CO.**  
3137 Commonwealth Ave. • North Chicago, Ill.

### Cantonment Drinking Fountain for Contemporary Architecture

The new Haws Cantonment-Type Drinking Fountain is designed with



smooth flowing lines to blend with any contemporary architecture. The bowl is constructed of gleaming white vitreous china and is attached to the wall with a Tensaloy wall bracket. The new Model 1505 fountains have all the necessary sanitation features of other Haws products.

A new chrome-plated brass drinking bubbler, Model 127, is also available for fountains where change or replacement to full automatic steam control is desired. The unit contains a flow regulator valve that compensates for outside water pressures to deliver a bubbler stream throughout the full range of pressures automatically. Haws Drinking Faucet Co., 4th and Page Sts., Berkeley 10, Calif.

For more details circle #698 on mailing card.

### Multi-Use Soup Bases for Institutional Use

Four new Good Seasons Soup Bases and Seasonings have been developed by General Foods for the institutional field. The bases include chicken flavor with



chicken fat, chicken with chicken meat, beef flavor and onion. They may be used in sauces, gravies and as flavor extenders for stock as well as for soup.

The two chicken flavors and the beef are packed in one pound glass jars yielding five gallons of soup while the onion is available in eight ounce jars making five quarts. Only boiling water need be added to the base which offers consistent flavor, portion control and savings of labor and storage space. General Foods Corp., Institutional Products Div., White Plains, N.Y.

For more details circle #699 on mailing card.  
(Continued on page 102)



Direct Prices  
and Discounts to  
Schools, Churches,  
Clubs, Lodges and  
All Organizations  
COMPLETE CATALOG  
ON REQUEST

### TRUCKS FOR FOLDING TABLES



Monroe TS (transport - storage) Trucks make handling and storing of Folding Tables easy and quick. Combination offers.

### STEEL FOLDING CHAIRS

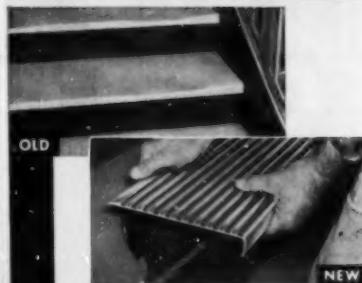
Monroe Steel Folding Chairs in attractive range of styles, sizes and prices. Excel in comfort, easy handling and durability. Also full line of non-folding chairs, desks and combinations for classroom, cafeteria and church school use.

### PORTABLE PARTITIONS

Monroe's new movable partitions change idle space into useful areas. Smooth Masonite panels, tubular steel frames, Swivel pedestals, casters or glides.

**THE MONROE COMPANY**  
27 Church St. Colfax, Iowa

### Stairways Dangerous?



Make them safe this  
easy practical way

**FREE**  
New  
Bulletin  
shows how  
to repair  
worn  
dangerous  
stairs  
**GET**  
**FULL**  
**DETAILS**

Superimpose LIFETIME ALUMINUM STAIR-MASTER SAFETY TREADS over worn steps. Safety-ribs contain diamond-hard abrasive grit for positive anti-slip protection. Aluminum base can't corrode. Minimize accidents, end makeshift repairs with this architecturally approved method.

**WOOSTER PRODUCTS INC.** •  
Spruce St., Wooster, O.

Name _____	Title _____
Company _____	
Address _____	
City _____	State _____

## In figuring your Painting Costs

### Here's a Sound Equation

$$\frac{\text{PAINT} + \text{LABOR}}{\text{AREA}} \div \text{YEARS OF SERVICE} = \underline{\text{TRUE PAINT COST}}$$



The above equation may not be perfect mathematics. But it does suggest an "engineered approach" to maintenance painting that can save you REAL MONEY.

To begin with, the cost of paint *per gallon* can be misleading, for it doesn't take into account the cost of *painting labor* which today is at least four times that of the paint. And paints like Barreled Sunlight that are *engineered* to go on faster and easier will make labor savings far beyond their slight extra cost per gallon.

We put this "Paint-plus-Labor" factor over "Area," for paints like Barreled Sunlight that are *engineered* to hide better and cover more area per gallon give you further savings on both paint and labor.

Finally, the whole thing has to be divided by Years of Service. For the less often you have to paint, the less your painting program costs over the years. Add to that the further savings in properly protected surfaces from paints *engineered* to stand heavy punishment, and the finest paints money can buy become the cheapest in terms of service.

So remember this "equation" and try the Barreled Sunlight "Engineered Paint" approach if you want **REALLY** worthwhile savings in your painting budget. It's the approach that's saving money *right now* for other leading industrial, institutional and commercial buildings, and it can save money *for YOU*.

For free, enlightening "on-the-wall" test that will prove our point, write today to Barreled Sunlight Paint Co., 35-C Dudley St., Providence 1, R. I.



## Barreled Sunlight®

Engineered

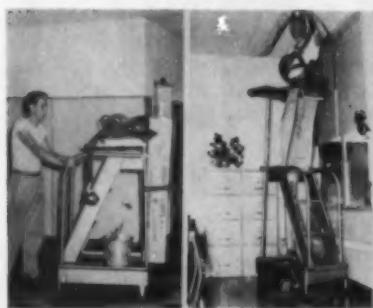
# Paints

For a Better Looking,  
Longer Lasting Paint Job  
At Lower Cost

## What's New . . .

### Mobile Ladder-Trucks for Overhead Maintenance

Two new models of the Safe-Lad mobile ladder-truck have been designed for



the overhead maintenance needs of any institutional building. Model M-4, with overall height of 55 inches, handles the seven to 11-foot zone, while Model M-6 reaches up to the 14-foot level.

The Safe-Lad rolls all needed supplies on upper and lower work trays right to the work area for cleaning windows, blinds and upper wall spaces, and for the maintenance of lights. It can be rolled through all doorways and into regular elevators. Although completely mobile, the unit provides a firm platform. When the maintenance man steps on the first step, a set of casters automatically retract, lowering the unit onto

skidproof legs. A simple reset lever mobilizes the unit again. The upper work tray adjusts to a convenient and safe waist level and locks automatically. A guard rail provides protection and leaves both hands free. Both units are of all steel, arc welded for long service. Safe-Lad Mfg. Co., 1001 S. E. Morrison St., Portland 14, Oregon.

For more details circle #700 on mailing card.

### Fan Ventilators for Quiet Operation

High efficiency and quiet operation at slow speeds are claimed for the two new Centriflow Fan Ventilators recently introduced. Designed for institutional use, where low noise levels are desirable, the ventilators are available in a V-belt drive for large capacities and in a low profile model of spun aluminum for installations requiring lower capacities. Ratings are guaranteed and both units have non-overloading, backward curved blade fan wheels with motors in separate, air-cooled compartments insulated for quietness by resilient rubber vibration pads. The ventilators are especially adapted for use in schools, hospitals, dormitories and other institutions. The Burt Mfg. Co., 11 E. South St., Akron 11, Ohio.

For more details circle #701 on mailing card.

(Continued on page 104)

### Tape Recorder Has Stereophonic Sound

The Ampex Model A-122 is a two-speed Stereophonic Player-Tape Recorder. The new design features a volume control indicator, mixer-fader controls, tape position indicator, positive controls and 3½ and 7½ speed selector. The new unit plays two-channel stereophonic tapes as well as half-track and full-track tapes.

For stereophonic reproduction, the new unit plays each of two separately recorded sound tracks from a single tape through two separate amplifier-speaker systems, giving the music a sense of direction and depth. The new Ampex "A" Series is offered in a newly designed,



lightweight carrying case, finished in two-tone gray; in a table top version, unmounted for custom installation, or as part of a complete console music system. The Ampex Corp., Redwood City, Calif.

For more details circle #702 on mailing card.

A black and white advertisement for Heywood-Wakefield Trim Line furniture. At the top left is the company's circular logo with the text 'HEYWOOD-WAKEFIELD H.W.' and 'EST. 1826'. To the right of the logo is the stylized script text 'Trim Line'. Below this, a caption reads: 'New simplicity of design achieves style, comfort and classroom efficiency with strength to pass the test of time.' In the center, there is a photograph of a student desk and chair set. The desk has a dark top and a light-colored metal frame. The chair has a dark seat and backrest with a matching metal frame. At the bottom, there is a small block of text: 'WRITE FOR COMPLETE CATALOG OF TUBULAR STEEL FURNITURE. Patents are pending on all the pieces of the Heywood-Wakefield Trim Line design. Heywood-Wakefield, School Furniture Division, Gardner, Mass. and Menominee, Mich.'

"The Lustre that Lingers"

DOLCOWAX

The lustrous,  
non-scuff FLOOR WAX  
that outlasts them all

DOLCOWAX spreads swiftly on large floor areas where in addition to appearance, safety and durability are major considerations. Premium quality DOLCOWAX is a money saver because it gives non-scuff protection longer. DOLCOWAX second-coats beautifully without crawling. Easy to apply on linoleum, cork, asphalt tile, mastic, rubber, vinyl or sealed wood flooring.

For free sanitary survey  
of your premises consult  
your Dolge service man.

**DOLGE**  
Westport, Connecticut

*in a class by itself . . .*



## Burroughs Budgetary Accounting Machine prepares daily reports that tell the complete dollars-and-cents story at a glance!

Take a good look at your daily budget reports. And check those periodic reports, too. Are the figures unquestionably accurate? Complete to the minute? Easy as ABC to interpret?

A "yes" to all three means your accounting department is in the most efficiently run, streamlined class —right where it should be! In fact, it sounds like you're already one of the thousands of users of the Burroughs Budgetary Accounting Machine.

For the Burroughs combines the modern direct-to-the-answer principle with new simplicity of form design. The result: your reports are *always* current, speedily and economically produced; and tell the complete story at a glance.

From the machine-proved ledger balances you get a true picture of any activity at any time. Balances

shown on the Budget Ledger accounts are quickly summarized to give you clear, concise periodic reports. And there's little, if any, chance for error. The Burroughs mechanically prevents posting errors caused by picking up previous balances incorrectly.

If you're not already using this Burroughs, isn't it just what you need to streamline and simplify your entire budget control operation? Call our nearby branch office for a free demonstration. Or write to Burroughs Corporation, Detroit 32, Michigan.

*Wherever There's Business There's*



"Burroughs" — Reg. TM.

## What's New . . .

# CHUTES

**FOR CENTRALIZED DISPOSAL OF RUBBISH  
WASTE PAPER, SWEEPINGS, SOILED LINEN  
IN COLLEGES, UNIVERSITIES, ELEMENTARY  
SCHOOLS, HIGH SCHOOLS, DORMITORIES ETC.**

With high operating expenses for housekeeping personnel, chute costs can be written off in several years — therefore —



### WILKINSON CHUTES DO NOT COST MONEY BUT SAVE MONEY

Fire Protection provided with Underwriters Laboratory Inc. approved doors when required

Automatic sprinklers provided as standard equipment

Stainless steel and aluminum used exclusively

Efficient, Inexpensive and Foolproof

For further information and list of College and University installations contact

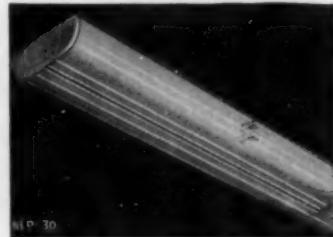
**WILKINSON CHUTES, INC.**

619 E. Tallmadge Ave.  
Akron 10, Ohio

Represented in all principal cities

### Twin-Unit Fixture Occupies Minimum Space

The new Benjamin Capri fluorescent lighting unit has shallow lines yet meets



the IES School Lighting Practice. The twin-unit Capri is three by 10 inches wide and comes in 48 and 96 inch lengths for individual or continuous installation.

A vent runs the length of the bottom of the unit to enable air to circulate, minimizing dirt accumulation. Polystyrene plastic diffusing panels are easily removed for cleaning. The Capri is designed for two 40 watt Rapid Start or 96 inch Slimline lamps and is pendent mounted. Newly designed sliding hangers are also available to allow the unit to be mounted under duct work. Benjamin Electric Mfg. Co., Des Plaines, Ill.

For more details circle #703 on mailing card.

### Gas Burners Feature Flexibility of Design

A new line of atmospheric type gas burners is now available for burning natural, manufactured or mixed gases. Great flexibility of design and capacity for almost universal use where requirements demand high input rating in limited space is possible because of the number and arrangement of nozzles in the new line. An ideal mixture of gas and primary air is created with the Ray Tandem-Jet Nozzles, and the Ray Flame Retention Ring stabilizes the flame at the burner tip for a smooth steady flame. The burners are virtually noiseless and electronic safety control equipment is standard. Ray Oil Burner Co., 1301 San Jose Ave., San Francisco 12, Calif.

For more details circle #704 on mailing card.

### Papaya Nectar Base Offers Taste Variety

Variety can be added to the beverages available in the cafeteria or lunchroom with Papaya-Vita, a new papaya nectar base now available in quart cans for institutional use. The base, when diluted, makes one gallon of the tropical drink. The nectar is made from the natural juices and pulp of specially hybridized fruit. It is packed in cans, with no preservatives or coloring, and requires no refrigeration until mixed. Stevens Tropical Plantation, Okeechobee Rd., West Palm Beach, Fla.

For more details circle #705 on mailing card.

(Continued on page 106)

# AJUSTRITE ® CHAIRS and STOOLS for

### CLASSROOM



Permits proper seat height for both standard and higher requirements.

### LABORATORY



AJUSTRITE was first designed and made specifically for laboratory use.

### VOCATIONAL



AJUSTRITE offers many advantages to the effectiveness of instruction and practice.



A posture type chair with seat adjustment of 16" to 21", backrest horizontal and vertical adjustment of 5". Ideal for teaching and practicing posture in typing and other business classes. Some science classrooms and laboratories use this type to advantage. Also comes with higher adjustment ranges. Reasonably priced.

32 MODELS IN THE AJUSTRITE LINE

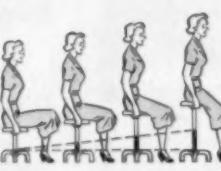


**GUARANTEED**  
against failure due to defective material or workmanship for a period of 10 years.

**FREE TRIAL**  
Samples furnished for 30-day trial without obligation. Send for illustrated folder.



**ADJUSTMENT**  
... to any Height Desired





3

# are you making WAXING times as hard...



...as it needs to be?

Have you studied your floor maintenance operations and costs lately? Are you satisfied you are getting the best results per hour of labor and dollar of expense? Remember 95¢ of every floor maintenance dollar is spent for labor. We suggest you call in your nearby Hillyard "Maintainer"® for a consultation. He will carefully study your floors, floor traffic and special problems, and will recommend in each case: (1) modern streamlined work methods and short cuts; (2) up-to-date labor-saving, dollar-saving tools and equipment; (3) specialized floor treatment products tailored to the particular type of floor and floor use that will cut your labor costs.

## CASE HISTORY—WAXING

FILE II

Tough, resilient Super Hil-Brite lasts 3 TIMES AS LONG as ordinary floor waxes. Eliminates expensive stripping and refinishing. Cuts labor costs up to 50%. Retains deep, rich lustre even after repeated cleaning — is easier to maintain in top condition.

The Hillyard Maintainer has had years of training and experience in every conceivable type of floor problem. He will gladly put this experience at your disposal, help train your staff. There's no charge, no obligation. He's "On Your Staff, Not Your Payroll."



ST. JOSEPH, MISSOURI  
SAN JOSE, CALIF.  
PASADENA, CALIF.

SEE IF THE MAINTAINER CAN HELP YOU!

HILLYARD St. Joseph, Mo.

Yes, I'll take you up! Without charge or obligation, have the Hillyard Maintainer® show me how to take advantage of new streamlined floor treatment procedures.

Name \_\_\_\_\_

Institution \_\_\_\_\_

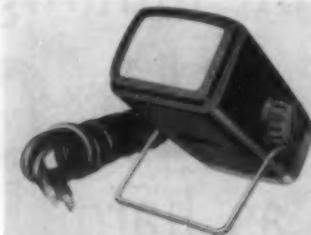
Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

## What's New . . .

### Filmstrip Viewer Is Self-Contained Unit

The new S.V.E. "E-Z Viewer" is a compact unit which can be used on a



desk or held in the hand for previewing or reviewing filmstrips. The viewer employs a two polished lens optical system which enlarges single-frame filmstrips three times. A metal stand assures a 45 degree viewing angle and when folded the unit is 4½ inches wide, 2¾ inches high and 5¾ inches long weighing 1½ pounds. An on-or-off switch operates a 7.5-watt night light on a 110-120 AC power source. Society for Visual Education, Inc., 1345 W. Diversey Pkwy., Chicago 14.

For more details circle #706 on mailing card.

### Pedestal-Type Table Folds for Quick Seating

Designed for use in lunchrooms and cafeterias, the Foldcraft Foldkrest table

is easy to fold and carry and to set up for quick seating. It is equally useful for permanent arrangements. The pedestal-type leg arrangement is self-leveling, making the table firm and unable to teeter. A special, foolproof locking toggle and non-skid rubber tipped legs also ensure its rigidity.

Foldkrest tables are available in 24 by 24 to 36 by 60 inch sizes with table connectors available for converting to banquet size. Round tops are also available in 30 to 48 inch diameters. Tempered Masonite or plastic tops are available with the 16 gauge tubular steel frames finished in brown hammerloid enamel. Foldcraft Company, Mendota, Minn.

For more details circle #707 on mailing card.

is required. Structural Clay Products Institute, 1520 18th St. N.W., Washington 6, D.C.

For more details circle #708 on mailing card.

### Fresh Citrus Fruit Sections Available in Gallon Jars

Fresh citrus fruit sections are now available in gallon jars for institutional use. The fruit is packed principally in Florida and sent to local markets under refrigeration and is made available to institutions through a local fruit broker or dairy. Varieties include orange, grapefruit, orange and grapefruit, and fruit salad which contains citrus fruits with pineapple, melon and maraschino cherries



for color. Citrus fruit sections add taste variety to breakfast service, salads and desserts. Florida Citrus Commission, Lakeland, Florida.

For more details circle #709 on mailing card.

(Continued on page 108)

**emphasis on  
structural strength  
and contemporary design**

126 years the leading makers of  
chairs and tables for public use

Write us your seating requirements.  
We will send appropriate  
illustrated material.

**THONET INDUSTRIES, INC.**  
One Park Avenue, New York 16, N.Y.

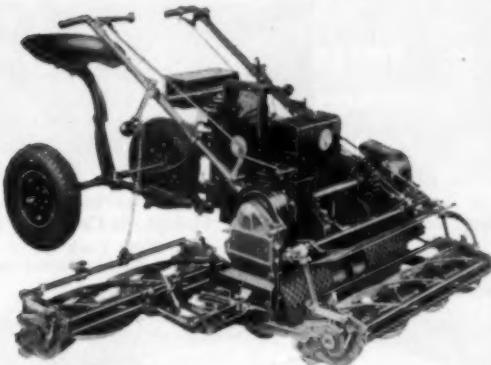
**SHOWROOMS:** New York Chicago Dallas Los Angeles Miami Statesville, N.C.

**THONET**  
INDUSTRIES, INC.

# STOP!

Don't specify any mower  
until you've had a  
**Locke** demonstration!

If your budget calls for a power mower, your first step to economical, trouble-free mowing is to see America's most wanted mower in action.



## Power Mowers and Trimmers

guarantee to save time and physical exertion, because they cut while they trim; overhang raised borders and eliminate hand trimming. The exclusive "finger tip" control and "floating" action assures maneuverability to do a complete job in one operation, without leaving streaks or rolled down uncut grass. It's the most versatile, efficient power mower for your money! But don't take our word for it...see it for yourself.

## Arrange For A Demonstration Today!

- 4 Basic Sizes: 25", 30", 70", 75"
- Single or Triplex • Riding Sulkies
- Briggs & Stratton Motors
- 70" & 75" available with reverse gear.



## POWER LAWN MOWERS

A product of The Locke Steel Chain Co.

1321 CONNECTICUT AVE. BRIDGEPORT 1, CONN.



*Let  
OUR PLAN  
complete  
YOUR PLAN*

Probably you are refunding a percentage of tuition fees when students are withdrawn because of sickness or accident. If this is the case you should be interested in our Tuition Refund Plan.

Our Plan will supplement and complete yours, assuring the student of a full refund on the following basis.

If a student is withdrawn: —

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1st week	80%	20%
2nd week	80%	20%
3rd week	60%	40%
4th week	40%	60%
5th week	20%	80%

If you do not make refunds after five weeks we refund 100% of the value of the unused fees from the date of withdrawal.

The Tuition Refund Plan has been in use for twenty-seven years and is now offered to students in over 300 schools and colleges. The Plan is flexible and can be fitted to your refund policy. Its low cost is paid by the student and there is no extra expense for you.

In many states the coverage of the Plan can be extended to include dismissals or non-medical withdrawals.

Write to us, enclosing your catalog, and we will tell you just how the Tuition Refund Plan will benefit you and your students.

*The  
TUITION REFUND  
PLAN*

**A.W.G. DEWAR**  
INCORPORATED

*Educational Insurance Underwriters*  
141 Milk Street, BOSTON 9, Massachusetts  
625 Market Street, San Francisco 5, California

## What's New . . .

### Portable Platform Folds for Transport

Easy folding and rugged strength are features of the Easi-Nest Mackintosh



Stands. The readily portable units are of one-piece, electrically arc welded construction throughout, employing  $\frac{1}{8}$  inch steel channel,  $1\frac{1}{2}$  inches deep. Platforms are engineered for over 200 pounds pressure per square foot and are available in a choice of finish and colors. Standard sections are two by eight feet for platforms four by eight feet and up, eight, 16, 24 or 32 inches high. Rollway Grandstand Corp., 306 N. Vermont Ave., Los Angeles 4, Calif.

For more details circle #710 on mailing card.

### Overhead Door Closer Is Complete Control Unit

The redesigned Rixson concealed overhead type door closer is now a complete door control device. The compact design permits installations on modern, shallow head jamb. In the new unit a hydraulic resistance or back check starts to slow down or check the opening action of the

door when it approaches 80 degrees. The door can be stopped at any one of four pre-determined factory-set positions.

A built-in door holder holds the door at any one of four positions when specified. The closing speed from open to approximately 15 degrees is regulated by one adjustment as the door closes and the latch speed from 15 degrees to closed position is regulated by another separate adjustment. The redesigned control is available in three sizes for center and butt hung installations. The Oscar C. Rixson Co., 9100 W. Belmont Ave., Franklin Park, Ill.

For more details circle #711 on mailing card.

### Single Tank Dishwasher Has Power Wash

The Universal SE Economy Model Dishwasher features a newly designed power wash with jet nozzles which revolve above and below the dishes for complete washing and rinsing. The single tank semi-automatic door type machine handles  $19\frac{1}{4}$  by  $19\frac{1}{4}$  inch racks. It has three doors, two operating simultaneously for easy access or for positioning in either straight through or corner operation. All interior parts are easily removed by hand for easy cleaning. Universal Dishwashing Machinery Co., Nutley 10, N.J.

For more details circle #712 on mailing card.

(Continued on page 110)

### Triscuit Wafers in Individual Servings

Nabisco Triscuit Wafers are now heat-sealed in sanitary packages for individualized servings. The crisp wafers add taste variety when served with salads, soups, cheeses and other foods. National Biscuit Co., 425 Park, New York 22.

For more details circle #713 on mailing card.

### Prismalume Lighting Is Free From Glare

The new Prismalume Controlens No. 6024 fluorescent lighting fixture produces high footcandle lighting which is entirely free from glare. It is designed for troffer installations, luminous ceiling panels or complete over-all ceilings, for installation in two-foot fluorescent source modules. It employs conical prismatic elements formed in a concave shape, having both longitudinal and transverse



fins. The new lighting design is effective for use in schools, auditoriums and other public areas. Holophane Company, Inc., 342 Madison Ave., New York 17.

For more details circle #714 on mailing card.

### Cut Maintenance \$600 yearly per unit with WORLD Hand Dryers

Best By Test!  
Factory Guaranteed!

A black and white photograph of a hand dryer being used to dry a person's hands. The hand dryer is mounted on a wall and has a circular opening where the hands are being dried.

THOUGHTFUL BUYERS USE WORLD!

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Northwestern University  
Chrysler Corp.  
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WORLD DRYER CORPORATION  
616-22 W. Adams St., Chicago 6, Ill.

MAIL THIS COUPON NOW!

Gentlemen: Without obligation send me copies of letters from users, also folder of facts including cost-saving figures and full details on your FREE-TRIAL offer.

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Those who make a living feeding or housing know the value of interior design... by mandel

Mandel Brothers Contract Division has long been management's source for the best in interior design, as well as functional, up-to-date furnishings. Mandel Men have helped many realize the most from building or remodeling budgets.

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# Revolutionary new heating for college buildings



**Each room a separate heating zone.** Here is the economical answer to the varied heating requirements of any college or university. Each room has a thermostat, providing individual, independent temperature control.

Heating requirements are never the same in every room, whether in a dormitory, classroom, laboratory or other building. For example, the windward side of a building needs more heat than

the sheltered side, and the sunny less than the shaded side. SelectTemp room heating units automatically hold the desired temperature in each room, whether heat loss or gain is great or small. When a window is opened in an overheated room, costly fuel is being wasted. With the SelectTemp heating system, overheating is avoided, because each room is a separate, self-regulating zone.

**Economically installed — low operating costs**  
Whether in new or existing construction, the SelectTemp heating system can be installed at a cost that is no more than many systems which do not provide the many SelectTemp advantages. SelectTemp owners also report substantial reductions in fuel costs.

**Heats only the rooms you need.** With individual thermostatic control, the temperature can be turned down in temporarily unused rooms, which can be quickly reheated when needed.

**Send for free literature.** Iron Fireman will gladly send you a free booklet describing SelectTemp, the new, revolutionary but thoroughly proved heating system. Fill out the coupon below.



SelectTemp room heating units are only 18 inches high; recessed in walls, they require no floor space. Each unit complete with its own thermostat, air filter, steam driven fan and heat exchanger. Low pressure steam is supplied by an oil, gas or coal fired boiler, or from central steam lines. Units can be painted to match walls.

## IRON FIREMAN.

*Engineered* HEATING AND COOLING



IRON FIREMAN MANUFACTURING CO.  
3434 West 106th Street, Cleveland 11, Ohio  
(In Canada write to 80 Ward Street, Toronto)

- Send SelectTemp specifications and full information.  
 Arrange for brief demonstration of SelectTemp room unit, in actual operation, in our office.

Name \_\_\_\_\_  
Firm \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

## What's New . . .



### LABORATORY FURNITURE

Our representative will gladly assist in any problem you may have . . . or if you prefer, write for our illustrated catalog.

**FREE**

For more than sixty years Peterson furniture has set the pace for style and design. Peterson engineers and leading educators, studying together the requirements of school furniture under actual working conditions, have built into each piece of equipment a quality and workability that has made Peterson the leading choice of educators for many years.

LEONARD PETERSON & CO., INC.

1228 FULLERTON AVENUE CHICAGO 14, ILLINOIS

### Electronic Film Splicer Employs Changed Technic

A new technic in film splicing is offered in the Neumade Shepard Electronic



Film Splicer. The splicer operates electronically, using the dielectric heating principle to bind the ends into what is described as "an indestructible splice." Developed as a result of research to find a method for splicing "Cronar," the new film which cannot be satisfactorily joined by use of adhesive of conventional splicers, the new device will not only satisfactorily splice Cronar, but will handle 35, 16 and 8 mm, magnetic, acetate, Cinemascope and standard film. Splicing is fast and permanent, using no cement or solution and requiring minimum overlap. Neumade Products Corp., 250 W. 57th St., New York 19.

For more details circle #715 on mailing card.

### Easy Cleaning and Long Wear for Loxitex Tackboards

Loxitex Tackboards offer a number of practical advantages not always found in this type of product. The surface of genuine Vicrtex vinyl-coated fabric is laminated under high pressure to a treated pulpboard backing, permitting pins and tacks to go in easily and hold



tight. The holes close when tacks are removed. The tackboards do not stain, crack, chip, peel or scratch and can be easily cleaned when necessary. The material is fire and soil-resistant and stays pliable and spongy under long, hard use.

Six fadeproof colors are available in the new Loxitex, including Limed White, Cinnabar Coral, Sand Tan, Celadon Blue, Sandalwood Brown and Willow Green. The tackboards can be installed with or without trim, are economical in first cost and remain attractive and functional through years of use with minimum maintenance. Loxit Systems, Inc., 1217 W. Washington Blvd., Chicago 7. For more details circle #716 on mailing card.

(Continued on page 112)

**Now—YOU CAN CUT  
FLOOR MOPPING COSTS**

Powerful, controlled squeezing action, provided by interlocking gears, wrings mops really dry—without tearing or twisting. Fast, splash-free operation speeds mopping and reduces costly labor.

Highest quality materials and construction assure long, trouble-free service. Exclusive electroplated finish gives Geerpres wringers maximum corrosion resistance. Buckets either galvanized or stainless steel. Ball-bearing, rubber casters for easy moving . . . do away with lifting and splashing.

Write now for catalog listing all types and sizes, accessories, hints for more efficient mopping.

**GEERPRES WRINGER, INC.**  
P. O. BOX 658  
MUSKEGON, MICHIGAN

HONOR CHOICE IN SCHOOLS EVERYWHERE



## STEEL FURNITURE AND LOCKERS



No. 6655 TEACHER'S DESK

No. 6276 LIBRARY TABLE

No. 2815 SIDE CHAIR

No. 5401 FILE

LOCKERS

No. 835  
PRINCIPAL'S  
CHAIR

No. 5401  
LETTER SIZE  
FILE



No. 6647  
TEACHER'S DESK

### ASE Quality—Cheaper By the Year As the Years Go By

Modern in design... functional, rugged and dependable. ASE Steel School Furniture and Lockers provide lasting service, attractive appearance and day-to-day efficiency. Bonderite treated to assure a lustrous, permanent, corrosion-resistant finish. Write now for more information.



No. 3487 STORAGE CABINET



No. 6677 PRINCIPAL'S DESK



No. 840  
POSTURE  
CHAIR



No. 545 HI MODEL  
POSTURE CHAIR



BLUEPRINT  
FILE

There's an ASE Dealer Near You



**ALL-STEEL EQUIPMENT INC.**

AURORA, ILLINOIS

## What's New . . .

### Literature and Services

• The role that Mississippi Glass plays in the modern school is discussed in Catalog 57-G published by Mississippi Glass Co., 88 Angelica St., St. Louis 7, Mo. How rolled, figured and wired glass patterns apply in school architecture is outlined. Data on pattern characteristics, light transmission and other information is included in the booklet which also details Mississippi Glass in commercial, residential and industrial use.

For more details circle #717 on mailing card.

• The full product line manufactured by Waste King Corp., 3300 E. 50th St., Los Angeles 58, Calif. is described in a new catalog. Information on the Waste King dishwasher, commercial disposal line, gas and electric oven and range, and gas and electric incinerator is contained in the booklet.

For more details circle #718 on mailing card.

• "The Ideal Automatic Operator for Swing-Type Doors . . . for Every Type Building" is the title of Form No. ID-156 offered by Dor-O-Matic Division, Republic Industries, Inc., 7350 W. Wilson Ave., Chicago 3. All eight models of the new line of the automatic, concealed noiseless door operator known as the Invisible Dor-Man are described and illustrated in the folder.

For more details circle #719 on mailing card.

• The 1957 catalog of Halsey Taylor Drinking Fountains and Coolers is now available from The Halsey Taylor Co., 137 North Ave., N.W., Warren, Ohio. The booklet discusses the complete line and includes dimensions and illustrations.

For more details circle #720 on mailing card.

• A folder with helpful guidance information is available from the Hammond Organ Company, 4200 W. Diversey, Chicago 39. Entitled "Opportunity Keys With Organ Music," the 12-page booklet outlines a variety of career opportunities available in a number of fields through the electric organ.

For more details circle #721 on mailing card.

• Two new booklets describing "The Westinghouse Air Blender System" are now available from Westinghouse Sturtevant Div., Dept. T-304, 200 Reachville St., Hyde Park, Boston 36, Mass. Booklets B-5195 and B-5195-A explain the classroom application of the new heating and ventilating system.

For more details circle #722 on mailing card.

• A new catalog on Marlite plastic-finished wallpanels is obtainable from Marsh Wall Products, Inc., Dover, Ohio. It describes the entire line of decorated hardboard and illustrates colors, wood grains and marble panels available, as well as installation accessories.

For more details circle #723 on mailing card.

• Brulin Gym Finishes and Floor Seals are the subject of a new catalog sheet issued by Brulin & Company, Inc., 2939-45 Columbia Ave., Indianapolis 7, Ind. How these products add long life and economical maintenance to gymnasium and other wood floors is discussed, along with complete application information.

For more details circle #724 on mailing card.

### Suppliers' News

Diamond Crystal Salt Co., St. Clair, Mich., producer of salt, announces the acquisition of the controlling interest in the Jefferson Island Salt Co., Louisville, Ky. It is announced that the Jefferson Island company will be operated as an independent division of Diamond Crystal Salt Co.

Farley Manning Associates, 270 Park Ave., New York 17, public relations agency for the Paper Cup and Container Institute, Inc., announces the availability of a food facilities planning service for administrators of hospitals, schools, colleges, architectural firms and others concerned with food service. The new service is designed to assist those responsible for large-scale food service to effect economies in building and operating kitchens which are possible with the use of modern paper service products.



**TUBULAR  
STEEL  
FOLDING  
CHAIR**

**NUMBER 76 CHAIR**

**STRENGTH, DESIGN, FOR YOUR BEST BUY**

This handsome public seating chair is built for heavy service. Number 76 retains its quality appearance under most severe service conditions. Low maintenance costs and exceptional beauty make No. 76 your best public seating buy.

**Hampden**  
SPECIALTY PRODUCTS, INC.  
EASTHAMPTON - MASSACHUSETTS

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CHICAGO, ILL.  
PERMIT NO. 136  
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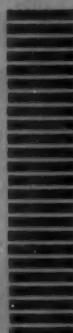
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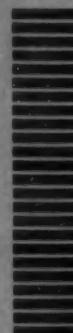
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March, 1957

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Cov. 4 Cov. 2 Cov. 3

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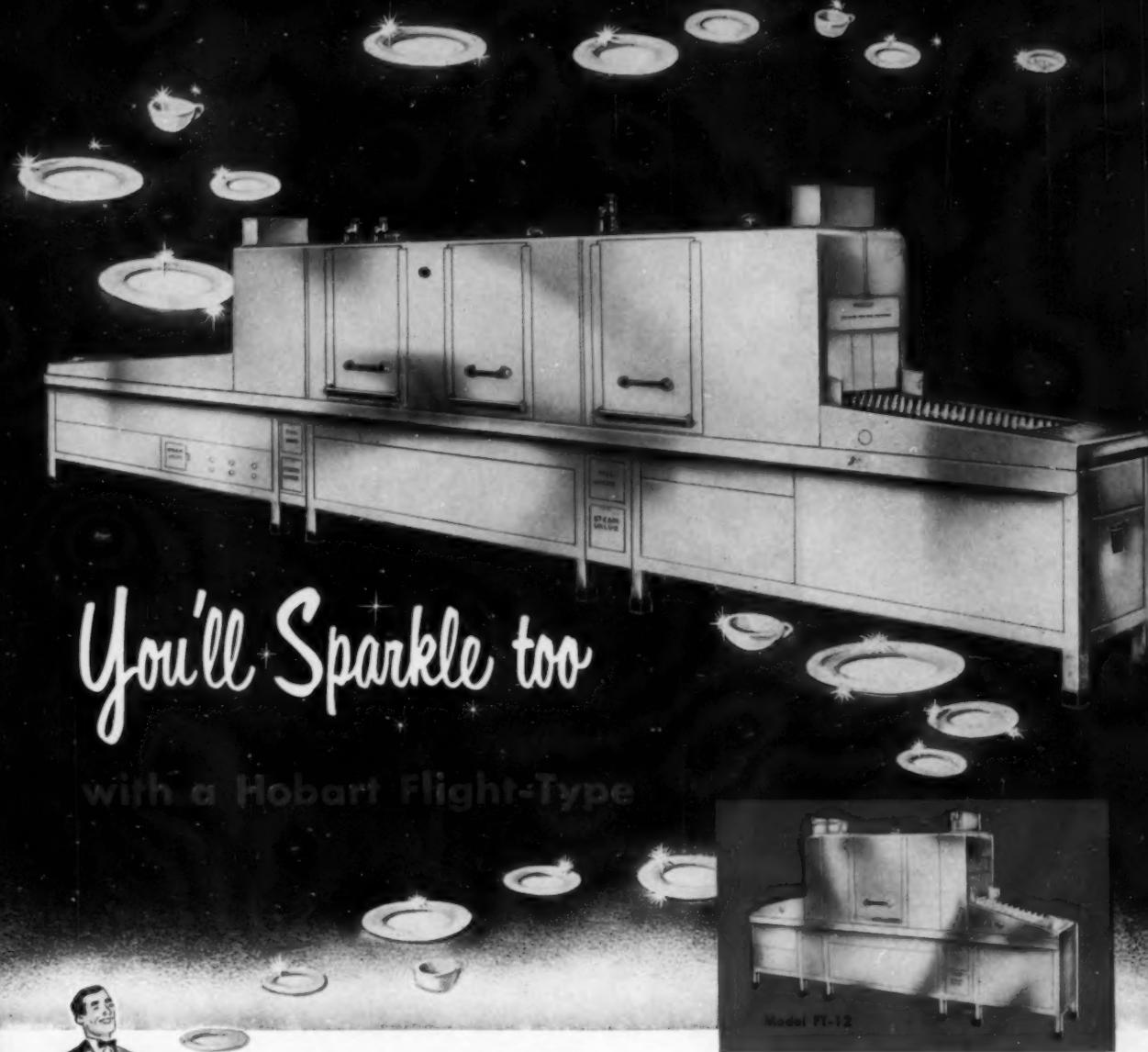
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You'll Sparkle too

with a Hobart Flight-Type

**You'll sparkle as your dishes and sanitary standards sparkle — and sparklingest of all will be your cost-per-serving figures!**

Amazingly fast, fully automatic, and continuous-racking, it's obvious that in these outstanding dishwashers human supervision and dish handling has been reduced to an absolute minimum. Yet with all of their speed and capacity, you get performance and dependability unequaled in dishwashing history—thanks to advanced, exclusive features coupled with the famed Hobart exclusive washing actions.

More—you can economically select a Hobart Flight-Type Dishwasher geared exactly to your volume requirements and available space. Model FT-12 fresh water scraps, power washes and rinses—all in 12 feet of space.

The Model FT-26 (illustrated) power scraps, power washes, power rinses and final rinses with additional time-for-drying. And between these two are many other models. Conveyor speeds can range from 5 to 12 ft. per minute.

If you have a smaller operation, there are many other Hobart automatic or semi-automatic models to choose from. Ask the advice of your local Hobart dealer. But if you're medium-sized and busy—or big—be sure to see the *Hobart Flight-Type*—the *only* dishwasher built with all stainless steel Flight-Type conveyors. A less expensive conveyor with nylon flight links is available. The Hobart Manufacturing Co., Troy, Ohio.

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Administration Post Graduate Building, University of Tennessee, Memphis. Furbringer & Ehrman, architects, Memphis; Hughes Heating Company, mechanical engineers and contractors, Memphis.

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***With Johnson Pneumatic Control you enjoy both all-weather comfort and year 'round air conditioning economies***

This new University of Tennessee building offers an excellent example of the exceptional comfort and economy values of Johnson Pneumatic Control Systems.

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The buildings on your campus may present entirely different problems. Regardless of what they may be, Johnson Control offers the simplest, most practical solution. Johnson Control is *pneumatic control*—it includes all modern control features, requires the fewest number of components and is far simpler than any other type of control you can use. It can be applied to any kind of air conditioning, heating or ventilating equipment made.

Remember, too, that every Johnson System, small or large, is designed, manufactured and installed by Johnson's own engineers and mechanics who have more experience in solving *your kinds* of control problems than anyone else in the industry. A nearby Johnson engineer would like to talk with you, your architect or mechanical engineer soon to prove how he can help you cut the cost of comfort. Johnson Service Company, Milwaukee 1, Wisconsin. Direct Branch Offices in Principal Cities.



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SINCE 1885

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